(17,376.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1899.

No. 269.

JOSEPHINE DESERANT, ADMINISTRATRIX OF THE ESTATES OF HENRI DESERANT, JULES DESERANT, AND HENRI DESERANT, JR., PLAINTIFF IN ERROR,

vs.

CERILLOS COAL RAILROAD COMPANY.

IN ERROR TO THE SUPREME COURT OF THE TERRITORY OF NEW MEXICO.

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UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, was plaintiff in error, and The Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of said Josephine Deserant, administratrix of the estate of Henri Deserant, as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

JOSÉ D. SENA,
Clerk of the Supreme Court of the Territory of New Mexico.

b I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 778 and 779; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case, and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,
Clerk Supreme Court, Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

c UNITED STATES OF AMERICA, *ss*:

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error, and Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of the said Josephine Deserant, administratrix of the estate of Jules Deserant, as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

JOSÉ D. SENA,
Clerk of the Supreme Court of the Territory of New Mexico.

d I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 777 and 778; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case, and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,
Clerk Supreme Court of the Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

e UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable judges of the supreme court of the Territory of New Mexico, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said supreme court, before you, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., was plaintiff in error and Cerrillos Coal Railroad Company was defendant in error, a manifest error hath happened, to the great damage of the said Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., as by her complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice be done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of October next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws of the United States should be done.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court, the 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

JOSÉ D. SENA,

Clerk of the Supreme Court of the Territory of New Mexico.

f I, clerk of the supreme court of the Territory of New Mexico, hereby certify that this writ of error was lodged in my office on the 21st day of February, 1899, together with a like writ of error in cases Nos. 777 and 779; that in said three cases there is but one record and set of proceedings in my office and in said supreme court, said three causes having been tried in the district court for Santa Fé county, New Mexico, as one case and brought into this court for review on one record certified up from said district court, and were heard in this court as one case, and I therefore make return to this writ, together with said two other writs, by transmitting herewith, under my hand and the seal of said supreme court, a true copy of the record of proceedings, pleadings, and opinion filed in said three consolidated cases.

JOSÉ D. SENA,

Clerk Supreme Court of the Territory of New Mexico.

Santa Fé, New Mexico, February 25, 1899.

g The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the clerk's office of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Henri Deserant, Jr., was plaintiff in error and you are defendant in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

h The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the office of the clerk of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error and you are defendant in error, to show cause, if any there be, why judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

Seal Supreme Court, Territory of New Mexico.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

The United States of America to Cerrillos Coal Railroad Company, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States, to be holden at Washington, on the first Monday of October next, pursuant to a writ of error filed in the office of the clerk of the supreme court of the Territory of New Mexico, wherein Josephine Deserant, administratrix of the estate of Jules Deserant, was plaintiff in error, and you are defendant in error, to show cause, if any there be, why judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Seal Supreme Court, Territory of New Mexico.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 21st day of February, in the year of our Lord one thousand eight hundred and ninety-nine.

WILLIAM J. MILLS,
Chief Justice of the Supreme Court of the Territory of New Mexico, etc.

As attorney for defendant in error mentioned in the foregoing citation, I accept service of copy of the within citation this 21st day of February, 1899.

R. E. TWITCHELL.

1 Be it remembered that on the 23rd day of July, A. D. 1898, there was filed in the office of the clerk of the supreme court of the Territory of New Mexico a transcript of record; which said transcript was and is in the words and figures following, to wit:

In the Supreme Court of the Territory of New Mexico, July Term, 1898.

JOSEPHINE DESERANT, Administratrix,
vs.
CERRILLOS COAL RAILROAD COMPANY.
} Nos. 777, 778, and 779.

Transcript of Record.

Error to Santa Fé county.

TERRITORY OF NEW MEXICO,
County of Santa Fé.

Be it remembered that heretofore, to wit, on the 28th day of May, 1895, there were filed in the office of the clerk of the district court for said county of Santa Fé three declarations, which declara-

2 tions were in the words and figures following, to wit:

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Henri Deserant, Jr., deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Henri Deserant, Jr., at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventy day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and
3 was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous and explosive gases which were from time to time generated therein and to warn its employees engaged as such miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise in the course of their employment as such coal miners from the generation and accumulation of noxious, poisonous and explosive gases in the said mine; but the said defendant on the contrary thereof negligently and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness,
4 unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might

have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air
5 shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary thereof, the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the pas-
6 sage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large

quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine and to provide suitable and sufficient ma-
7 chinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously, be forced through the same, but the said defendant not regarding its said duty in the premises negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places in said mine free from such gases, and the said defendant also negligently and carelessly failed to keep such machinery and applances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and
8 suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said

mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous, and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligences and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit,

the county of Santa Fé, aforesaid, the defendant was the
9 owner of, and was engaged in the operation of a certain coal
mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable, and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities
10 to dilute and render harmless and to expel therefrom
the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the

said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine; but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous
11 and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases
12 which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the pas-

sage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said
13 mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action hath accrued to
14 the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against

the said defendant for the sum of twenty-five thousand dollars' damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Henri Deserant, deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Henri Deserant, at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing
15 under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventy day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged as such miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous, and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently, and carelessly failed to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous, and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise in the course of their employment as such coal miners from the generation and accumulation
16 of noxious, poisonous and explosive gases in the said mine; but the said defendant on the contrary thereof negligently

and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness, unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

17 And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary, thereof the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits

18 through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which

from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the passage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant
19 was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine, and to provide suitable and sufficient machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously be forced through the same, but the said defendant not regarding its said duty in the premises negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated
20 therein and to keep the working places in said mine free from such gases, and the said defendant also negligently and carelessly failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other

outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous, and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous, and explosive gases, whereby and by means whereof large quantities of noxious, poisonous, and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligence and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised,
21 and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the defendant was the owner of, and was engaged in the operation of a certain coal mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful, and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of such noxious, poisonous, and explosive gases within the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable, and sufficient air shafts, air passages, stoppings, break-throughs, and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous, and explosive
22 gases which from time to time were generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable, and proper shafts, slopes, entries, air passages, break-throughs, stoppings

and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine; but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said
23 mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the opera-
24 tion of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper

appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the passage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

25

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action

26

hath accrued to the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against the said defendant for the sum of twenty-five thousand dollars' damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

In the District Court of the First Judicial District of the Territory of New Mexico, Sitting within and for the County of Santa Fé, in said District, for the Trial of Causes Arising under the Laws of the said Territory, at the June Term, 1895.

To the Honorable Napoleon B. Laughlin, associate justice of the supreme court of the Territory of New Mexico and judge of the first judicial district court thereof:

27 Your petitioner, Josephine Deserant, administratrix of the goods and chattels of Jules Deserant, deceased, thereunto duly appointed by the honorable, the probate court of the county of Santa Fé, in the Territory aforesaid, the said Jules Deserant, at the time of his death having had his domicile in the county of Santa Fé, aforesaid, and having died intestate, complains of the Cerrillos Coal Railroad Company, a corporation created, organized and existing under the laws of the Territory of New Mexico, of a plea of trespass.

For that, whereas, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit the county of Santa Fé aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous and explosive gases which were from time to time generated therein and to warn its employees engaged as such coal miners of any and all danger which might arise in the course of their employment as such miners from the generation and accumulation of such noxious, poisonous and explosive gases within the said mine, but the said defendant not regarding its said duty in the premises, negligently and care-
28 lessly failed to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employés of said defendant engaged as such coal miners of any and all danger which might arise

in the course of their employment as such coal miners from the generation and accumulation of noxious, poisonous and explosive gases in the said mine; but the said defendant, on the contrary thereof negligently and carelessly employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein, and of the unfitness, incompetence, unsuitableness, unskillfulness and inexperience of the persons so employed, the said defendant had or by the use of ordinary care might have had, full knowledge, while the same was wholly unknown to the plaintiff's intestate, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine, at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited
29 and set on fire and exploded with great and terrific force and violence whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the said plaintiff alleges, that, heretofore, to wit, on the twenty-seventh day of February, 1895, at to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the defendant as a coal miner in said coal mine, and it then and there became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous and explosive gases, but the said defendant, not regarding its said duty in the premises, negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which
30 might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein, and to keep the working places in said mine free from such noxious, poisonous and explosive gases; but on the contrary thereof, the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air shafts and air passages, stoppings, break-throughs and other conduits through which

a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases, which from time to time were generated in said mine, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages and stoppings, break-throughs and other conduits and passageways, that the passage of the air into and to the workings of that part of the said defendant's mine wherein the said plaintiff's intestate was employed, became and was obstructed and cut off and large quantities of noxious, poisonous and explosive gases were generated and permitted to accumulate in that part of the said defendant's mine, at and near the place where the plaintiff's intestate was so employed as such miner, and the same were without fault or negligence on the part of the plaintiff's intestate; but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and terrific
31 force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof, did then and there die; wherefore an action hath accrued to the said plaintiff to recover from the said defendant, damages in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, the said plaintiff say-: That heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain mine, known as and called the White Ash mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs and stoppings, and other outlets and inlets in the excavating and operation of its said coal mine, and to provide suitable and sufficient machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein, and to keep the working places of said mine free from such gases and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings and machinery and appliances in good repair and condition, so that pure air might at all times and continuously, be forced through the same, but the said defendant not regarding its said duty in the premises
32 negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine, and to provide suitable and sufficient machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places in said mine free from such gases, and

the said defendant also negligently and carelessly failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good repair and condition so that pure air might at all times and continuously be forced through the same to the working places of the said mine, but, on the contrary thereof, the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine, to become so out of repair and unsafe and insufficient that it became and was impossible to force into the said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases, which were from time to time generated therein and to keep the working places of said mine free from such noxious, poisonous,
and explosive gases, whereby and by means whereof large
33 quantities of noxious, poisonous and explosive gases became
and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the defendant and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross negligences and carelessness of the said defendant, ignited and set on fire and exploded with great and terrific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated, and in consequence thereof did then and there die; wherefore an action hath accrued to the said plaintiff to recover damages from the said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action the plaintiff alleges that heretofore, to wit, on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the defendant was the owner of, and was engaged in the operation of a certain coal mine, known as the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and it then and there became and was the duty of the said defendant to employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same so as to discover the noxious, poisonous, and explosive gases which were from time to time generated therein and to warn its employees engaged therein of any and all danger which might arise in the course of
their employment from the generation and accumulation
34 of such noxious, poisonous and explosive gases within
the said mine, and it also became and was the duty of the said defendant in and about the operation and excavation of its said coal mine to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places

of said mine free from such noxious, poisonous and explosive gases, and it also became and was the duty of the said defendant to furnish and provide fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and to provide suitable machinery and appliances for forcing pure air into said mine in sufficient quantities to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places of said mine free from such gases, and it also became and was the duty of the said defendant to keep said shafts, slopes, entries, air passages, break-throughs, stoppings, machinery and appliances in good repair and condition so that pure air might at all times and continuously be forced through the same to the various working places in the said mine: but the said defendant not regarding its said duty in the premises, negligently and carelessly failed to
35 employ fit, competent, suitable, skillful and experienced persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time generated therein and to warn the employees of said defendant engaged therein of any and all danger which might arise in the course of their employment from the generation and accumulation of noxious, poisonous and explosive gases in the said mine of the said defendant, and the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts and air passages, stoppings, break-throughs and other conduits through which might be forced by proper appliances and machinery a sufficient quantity of pure air to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated therein and to keep the working places in said mine free from noxious, poisonous and explosive gases, and the said defendant negligently and carelessly failed to furnish fit, suitable and proper shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets in the excavation of its said coal mine and negligently and carelessly failed to provide suitable machinery and other appliances for forcing pure air into the working places in said mine in sufficient quantities to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from such gases, and said defendant
36 also negligently failed to keep such machinery and appliances, slopes, shafts, entries, air passages, break-throughs, stoppings and other outlets and inlets in good condition and repair so that pure air might at all times and continuously be forced through the same to the working places of the said mine; but on the contrary thereof the said defendant negligently and carelessly employed unfit, incompetent, inexperienced, unsuitable and unskillful persons to superintend and oversee the operation of its said coal mine and to inspect the same for the detection of noxious, poisonous and explosive gases which were from time to time gen-

erated therein, and the said defendant negligently and carelessly provided unfit, unsuitable and insufficient air passages, stoppings, break-throughs and other conduits through which a sufficient quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless the noxious, poisonous and explosive gases which from time to time were generated in said mine and to keep the working places of said mine free from such noxious, poisonous and explosive gases, and the said defendant so negligently and carelessly constructed the said air passages, stoppings, shafts, break-throughs and other conduits, and passageways, that the passage of air into and through the works of that part of the mine aforesaid, where plaintiff's intestate was employed, was obstructed and cut off; and the said defendant negligently and carelessly furnished unfit, unsuitable and improper shafts, slopes, entries,

37 air passages, break-throughs, stoppings and other outlets and inlets in the excavation and operation of its said coal mine and furnished unsuitable and insufficient machinery and other appliances for forcing pure air into the working places of said mine to dilute and render harmless and to expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein and to keep the working places of said mine free from said gases, and the said defendant negligently and carelessly permitted and suffered its shafts, slopes, entries, air passages, break-throughs, stoppings and other outlets and inlets and its machinery and other appliances for forcing pure air into the working places in said mine to become so out of repair and unsafe and insufficient that it became and was impossible to force into said mine a sufficient quantity of pure air to dilute and render harmless and expel therefrom the noxious, poisonous and explosive gases which were from time to time generated therein, and to keep the working places of said mine free from such noxious, poisonous and explosive gases, whereby and by means whereof large quantities of noxious, poisonous and explosive gases became and were generated and accumulated in the said mine at and near the place where the plaintiff's intestate was employed by the said defendant, and the same were without fault or negligence on the part of the plaintiff's intestate, but by reason of the gross carelessness and negligence of the said defendant, ignited and set on fire and exploded with great and ter-

38 rific force and violence, whereby the plaintiff's intestate was burned, bruised and suffocated and in consequence thereof did then and there die.

Wherefor- an action hath accrued to said plaintiff to recover damages from said defendant in accordance with the form of the statute in such case made and provided.

And for another and further cause of action, plaintiff alleges that heretofore, to wit: on the 27th day of February, 1895, at, to wit, the county of Santa Fé, aforesaid, the said defendant was the owner of and engaged in the operation of a certain coal mine known as and called the White Ash coal mine, and the plaintiff's intestate was employed by the said defendant as a miner in the said coal mine, and the said defendant on the day and year aforesaid at, to wit, the

county of Santa Fé, aforesaid, negligently and carelessly and by its wrongful act, neglect and default caused the death of the plaintiff's intestate, the said plaintiff's intestate being without fault or negligence in the premises; whereby an action hath accrued to the said plaintiff to recover from the said defendant damages in the premises.

Plaintiff therefore brings this suit and prays judgment against the said defendant for the sum of twenty-five thousand dollars damages, together with costs of suit.

FELIX H. LESTER,
FRANK W. CLANCY,
NEILL B. FIELD,
Attorneys for Plaintiff.

39 And afterwards, to wit, on the first day of June, 1895, there *was* filed in the said office of said clerk, three pleas, which said pleas were in the words and figures following, to wit:

In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3580.

And the said defendant, by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when, &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

40 In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3581.

And the said defendant by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof

complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

In the District Court, County of Santa Fé, Territory of New Mexico.

JOSEPHINE DESERANT, Adm'x, Plaintiff,
vs.
CERRILLOS COAL RAILROAD COMPANY, Defendant. } No. 3582.

41 And the said defendant by Henry L. Waldo and R. E. Twitchell, Esquires, its attorneys, comes and defends the wrong and injury, when &c., and says that it is not guilty of the said supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against it. And of this the said defendant puts itself upon the country, &c.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for Defendant.

And the said plaintiff doth the like.

NEILL B. FIELD,
FELIX H. LESTER,
F. W. CLANCY,
Attorneys for Plaintiff.

And afterwards, to wit, at a special term of the said district court, begun and held for the trial of causes arising under the laws of said Territory in said county of Santa Fé, and on the 22d day of April, 1896, the following, among other, proceedings were had in said court:

JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580. Trespass.

JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3581. Trespass.

42 JOSEPHINE DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3582. Trespass.

This day comes the plaintiff in each of the above and foregoing cases, and moves the court to consolidate the same for the purpose

of trial, and to order that the said causes shall be tried together before the same jury, and file herein the affidavit of Neill B. Field in support of said motion, and the court having seen the said motion, and being fully advised in the premises and concerning the same, doth order that said motion be and the same is hereby granted.

And afterwards, to wit, at the regular December term, 1897, of said court, and on the fourth day of said term, the same being the 16th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

Now comes the said plaintiff by her attorney-, Neill B. Field and F. W. Clancy, Esqrs., and the said defendant by R. E. Twitchell, Esq., and issue having heretofore been joined between the parties, they proceed to the selection of a jury to try the three cases so consolidated.

And afterwards, to wit, at the term last aforesaid of said court, and on the fifth day of said term, the same being the 17th
43 day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esq. Thereupon comes a jury, to wit:

Abram Velarde	Manuel Roibal
Amade L'Baca	Esquipolo Martinex de Aguero
Jose Maria Lopez	Agapito Vigil
Felipo Romero	Geronimo Benavides
Reyes Vigil	Francisco Vigil
Anastacio Sandoval	Tomas Erwin.

Twelve good and lawful men of the body of the county of Santa Fé, who, being duly elected, empaneled and sworn the truth to speak upon the issues joined between the parties, listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the sixth day of said term, the same being the 18th day of December, 1897, the following, among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

44 And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term, last aforesaid of said court, and on the seventh day of said term, the same being the 20th day of December, 1897, the following, among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs, and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the eighth day of said term, the same being the 21st day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

45 And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the ninth day of said term, the same being the 22d day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes the juro heretofore empaneled in said cause, and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the tenth day of said term, the same being the 23d day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant by its attorney, R. E. Twitchell, Esqr., again comes
46 the jury heretofore empaneled in said cause and listen to a portion of the evidence.

By consent of counsel for both parties it is ordered that further proceedings in said cause be and *is* hereby adjourned until Monday morning, the 27th inst. at nine o'clock.

And afterwards, to wit, at the term last aforesaid of said court, and on the thirteenth day of said term, the same being the 27th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the defendant by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled, in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the fourteenth day of said term, the same being the 28th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff by her attorneys,
47 Neill B. Field and Frank W. Clancy, Esqrs., and again comes said defendant by its attorney R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and listen to a portion of the evidence.

And afterwards, to wit, at the term last aforesaid of said court, and on the fifteenth day of said term, the same being the 29th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff, by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the said defendant, by its attorney, R. E. Twitchell, again comes the jury heretofore empaneled in said cause and hears the remainder of the evidence, instructions of the court, and a portion of the argument of counsel.

And afterwards, to wit, at the term last aforesaid of said court, and on the sixteenth day of said term, the same being the 30th day of December, 1897, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

And now again comes the said plaintiff, by her attorneys, Neill B. Field and Frank W. Clancy, Esqrs., and again comes the
48 said defendant, by its attorney, R. E. Twitchell, Esqr., again comes the jury heretofore empaneled in said cause and hears the remainder of the argument of counsel, and retire to deliberate upon their verdict in the above three causes, and returning into court do say upon their oaths aforesaid, in each of the three said causes:

"We, the jury, find the issues in the above-entitled cause in favor of the defendant."

AMADO L. BACA, *Foreman.*

Whereupon the plaintiff gives notice of a motion for a new trial.

And afterwards, to wit, at the term last aforesaid of said court, and on the twenty-second day of said term, the same being the 6th day of January, 1898, the following among other proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'x, ET AL.
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

This cause coming on to be heard on a motion for a new trial heretofore filed herein, and after hearing argument of counsel of the respective parties, the court not being sufficiently advised in the premises, takes the same under advisement.

And afterwards, to wit, at the term last aforesaid of said court, and on the forty-seventh day of said term, the same being the 4th day of February, 1898, the following, among other, proceedings were had, to wit:

49 JOSEPHINE DESERANT, Adm'x, ET AL. *vs.* CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

These causes coming on to be heard on the motion of the plaintiff for a new trial and the court being fully advised, it is ordered that said motions be and the same hereby are overruled, and the court orders it to be certified upon the record that said motion is overruled upon the ground that there was a conflict of evidence in the cases and this court is of opinion that in such a case it has no discretion to set aside the said verdicts as against the weight of the evidence.

And afterwards, to wit, on the twenty-second day of June, 1898, there was filed in the office of said clerk a bill of exceptions, which bill of exceptions was in the words and figures following, to wit:

50 In the District Court of the First Judicial District of the Territory of New Mexico for the County of Santa Fé.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3580.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3581.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. } No. 3582.

} Consolidated.

Be it remembered, that on the trial of the above-entitled causes, the following proceedings were had, to wit:

JOSEPHINE DESERANT, being sworn as a witness in her own behalf, testified that she lived in Madrid, New Mexico, that her husband was dead, that his name was Henri Deserant; that he died on the 27th of February, 1895, at Madrid; that Henri Deserant the younger and Jules Deserant were her sons, and that they died with their father at the same time; at the time that they died her hus-
51 band was fifty-three years of age, her son Henri was seventeen years of age and her son Jules was a little over fifteen years of age; they were working in the White Ash mine at the time of their deaths and that her husband was engaged in coal mining; that she saw her husband and sons about 6.30 in the morning of the day that they were killed and that she had never seen them afterwards; that her husband was in good condition and had good health up to the time of his death and was able to earn sometimes $3.50 per day and $3.00 and sometimes $2.50 per day; that both of her sons were in good condition and good health and could earn, the elder from two to two dollars and a half per day, and the other,

one and one and a half a day; that her husband was a sober, hard-working man and treated his family well and that her sons were both of good character and good deportment.

On cross-examination the witness further testified that she was at her house on the morning of the accident, and was notified of the accident by one of her sons; that while she could not say exactly, she thought her husband and sons had been working in the mines for not quite a year; that her husband had had his right shoulder broken in the same mine; that when the accident happened she was left absolutely without means and had to work to make her living, and had a little girl left; that the youngest boy had worked in the mines three or four or five months and the other boy about a year or not quite a year; that during the time they worked in the mine with her husband they brought all their money to her, for her to use it, and the bal-
52 ance of her family; that her husband worked continuously until he was hurt and then he didn't work; that he worked with his sons prior to the time when his arm was broken; that both of her sons did not at once go to work when she first moved to Madrid; that she could not say whether her youngest son did not go to work until after her husband had recovered from the breaking of his arm; that the youngest son had worked about two months when the explosion happened and the older one a much longer time; that her husband was disabled by the accident to his arm or shoulder about six months.

On redirect examination she testified that her husband recommenced to work in the mines about two and a half or three months before the explosion.

On recross-examination she testified that her elder son had worked before the younger one went in, but that it was not the case that the younger one went to work because her husband's arm was weak, but because the boy wanted to work.

J. C. PORTERFIELD, being sworn as a witness for the plaintiff, testified that he was twenty-nine years old, lived at Madrid and was a mining engineer, and that his residence and occupation were the same in February, 1895, at which time he was employed by defendant; that a map which was in the court-room was a map showing the inside works of the White Ash mine on the 27th of February, 1895, that he made the map and that it was drawn to a scale of one hundred feet to the inch; that the straight
53 line which runs down the center of the map from the top to the bottom indicates the main slope; that there were three colors of ink upon the map, black, blue and green; that the black indicates the workings, the blue the main air current and the green canvas brattice; that where the green or canvas was put in, was for the purpose of taking the air to certain parts; that the main slope or two edges were indicated by black lines extending its full length; that down the main slope for seven or eight hundred feet were old workings of which no correct map exists; that there was a pillar of coal forty feet thick left on each side of the main

slope, not cut except by cross-cuts or entries, the cross-cuts extending from the main slope to the back slopes or parallel slopes, which were driven parallel to the main slope for the purpose of returning the air; that at distances of between two and three hundred feet, entries were dug in the coal approximately at right angles to the main slope, and that these entries were called number one right, number two right, number one left and so on down; that the entries were driven in pairs, with thirty-feet pillars between the two; that they were driven in pairs to maintain the circulation of air; that what is called the back entry is lower than the top entry, and also acts as drainage for the top entry, which is used as a hauling road; that from the top entry rooms are turned and driven at an angle across the pitch of the coal, neither on a level nor directly up the pitch, but between; these rooms were driven a short distance only about nine or ten feet wide and then widened out to twenty feet
54 at which width they were maintained; that these rooms were from the lower rib of one room to the lower rib of the next room forty feet, that is twenty feet of room and twenty feet of coal between rooms; there being cross-cuts between the rooms for the passage of air; that where the entries were turned off the slope two tracks were laid which are called the parting, one track being for loaded cars and the other for empties, each track holding from twelve to fifteen cars; that inside of the parting was a trap-door indicated on the map by a short line at an angle so as to show which way the door opens; that there were no rooms turned off between the door and the main slope, but beyond the door, there was first driven what is called a plane; that the plane is kept narrow, from eight to ten feet in width, and driven in the same direction as the rooms, which were afterwards to be turned from the entry, and from this plane rooms were turned running back level toward the main slope so as to extract the coal lying above the parting, and these are called "the rooms off the plane," and are driven of the same dimensions as the other rooms; that the rooms off the plane were numbered 1, 2, 3, etc., commencing at the bottom, and the rooms off the main entry were numbered 1, 2, 3, etc., beginning at the first room beyond the plane; that when any body of coal was worked out the pillars were "pulled," that is, the coal which was left standing between the rooms was taken out and this was indicated by the small checkwork on the map, as for instance in the first left entry from room 2 to the face of the entry; that the air was kept in cir-
55 culation by a fan at the point marked fan-house where the arrows indicate the discharge of air; that the arrows at the entrance of the main slope show the "intake" and from that point the air followed the line indicated in blue ink; that the air entering at the mouth of the mine follows the main slope until it reaches the seventh right entry where it is divided or split, part going to the right and the remainder going on to the bottom of the slope, thence through the last cross-cut to the left parallel slope and then passing up successively through the seventh left entry into the parallel slope again, through the sixth left back entry to its face and around canvas brattice back to the last cross-cut, thence through that cross-

cut and to the face of the sixth left entry where it passes around canvas and back to the cross-cut leading to the upper air course of the sixth left entry, then to the parallel slope and up to the fifth left back entry, to the face of that back entry and around canvas brattice back to the last cross-cut and through that cross-cut to the fifth left main entry, and thence up to the face of that main entry around canvas and back to the plane of fifth left entry, and then up the plane and through the first, second and third rooms, and then through a cross-cut into room one of the entry and up room one into the fourth left back entry and up to the face of that back entry; that the fourth left entry was sixteen hundred and fifty feet long and the fourth left air course was one hundred and twenty-five feet back; that the air then goes through the cross-cut at the face of the back entry to the main entry and then up to the face of the main
56 entry and around canvas brattice and back along the entry; that there might have been a short piece of canvas extended into room eighteen, it being a room just then turned; that the air left the fourth left main entry at room seventeen, going up room seventeen and through the cross-cut into sixteen, around canvas to the face of sixteen and back to the cross-cut and through the cross-cut into fifteen, and so on from room to room back as far as room six, which was driven through into the third left back entry so as to give a shorter return for part of the air; that the other portion of the air was conducted through cross-entries in the same way on to the plane and through the rooms of the plane and carried up to the third left back entry through room one which was driven through; that the air after entering the third left back entry traveled to the face of that entry and through the cross-cut at the face up to the main entry and to the face of the main entry around canvas, airing room twenty-one and then into room twenty and up to its face, and around the faces of the rooms and through cross-cuts in the same manner as through the rooms of the fourth left back to room eight where the air was split, part going to the second left back entry through the opening of room eight made into that back entry and part being conducted through the other rooms and the plane, through the plane-rooms and up the plane to the second left back entry; that the air then traveled to the face of that back entry and through the last cross cut to the top entry and back along the top entry to room nine and around canvas to
57 the face of nine, then back the other side of the canvas to the entry again, then up through room eight, through the cross-cut into seven and then through these rooms in the same manner as below, to the plane, through the plane-rooms into the first left back entry and through the back entry and top entry to the beginning of the first left entry at the overcast or air-tight box built above the main slope; that at the other end of this overcast this air is joined by the air that has been traveling the right side of the mine and goes up to the old union slope near the mouth of which is the fan; that the fan is an exhaust fan and tends to produce a vacu-m; that the entries driven in pairs as above indicated, are

kept about the same distance from the slope and the only open cross-cut between them is somewhere near the face and when the entries are driven some distance beyond this cross-cut, a new cross-cut is dug between the entries, the previous cross-cut being closed up with a stopping, so that the air is forced to travel through the new cross-cut and marks on the map in the cross-cuts indicate these stoppings; that there should be no break in the continuity of the blue line on the map, which indicates the course of the air and that the air would take the course described if all the stoppings in the mine were air-tight.

Upon cross-examination the witness further testified that the third left entry was one hundred and fifty feet longer than the fourth left; that the air, if it met with no interruption, would pass the face of the third left entry before reaching the
58 overcast; that the distance that the air travels from the face of the fourth left to the face of the third left would be a little over three thousand feet; that the blue line on the map represents the course of the air through the left side of the mine and that it passes through room eight of the fourth left, that the air is conducted to faces of the rooms of the fourth left around canvas brattice, which separates the rooms longitudinally, being hung from the roof; that the green lines on the map indicate brattice, which, if in place, conducts the air to the faces of the room; that there is no direct air course to supply air to the lower portions of the rooms, but merely what air would go in there would be deviated from the regular course, such as by mules raising the curtains or such as might come in when the doors would be open; that there were usually five or six curtains hung across the entry between the inside room that had a cross-cut and the main slope, the object of these curtains being to make the air go up into the room instead of traveling along the entry.

On redirect examination the witness further testified that these curtains were hung all the way across the entry, and were tight, but they were not nailed at the bottom between the rails; that they were not in a solid piece, but had several thicknesses lapping over each other so that a man could lift them up and go in; that when a man or mule or car went through the curtains, a very little portion of air was carried because at the time one curtain would
59 be open there would be others which were tight, unless there happened to be some one going through all at the same time.

Plaintiff then offered in evidence the map about which witness testified, which was admitted as Plaintiff's "Exhibit A," and the original thereof is sent up to the supreme court with their bill of exceptions, in accordance with the order of the district court.

(See side page 517.)

J. W. RAY, being sworn as a witness for plaintiff, testified that his business was coal mining and that in February, 1895, he was fire boss in the White Ash mine for the defendant; that Mr. Donahue employed him as fire boss; that he worked for defendant in the

hard coal from September until January and went to the White Ash about the first of January; that he had been working in gas more or less ever since he had been digging coal and had been assistant fire boss in the Indian Territory for five or six months, but had not ever been employed regularly as fire boss in a mine; that Donohue did not give him any instructions as to his duty, but showed him around the mine and he knew his duty after that; that he never saw any written rules or regulations for the government of miners in force in that mine in February, 1895; that there was an explosion in the White Ash mine on the 27th of February, 1895; that he was fire boss at the time; that there were two fire bosses, Deighton being the name of the other; that there were two because there were two shifts working, one at night and the other in the daytime;
that he was the night fire boss; that he could not say exactly
60 when the double shift was put on, but that there were not
two shifts when he started in January; that at the time Donohue employed him the latter showed him around the places working on the right side in the fifth right and the sixth right, and then they went to the bottom of the slope and through the cross-entry into the back slope and up to the seventh left back entry and into the main entry and up through the back slope to the sixth back entry, and then to the face of the main entry and back to the back slope, and through that to the fifth and to the face of the fifth back entry, and into the fifth main entry, and then went up number one room to the fourth back entry where they came to some water, and Donohue told him it was not necessary to go through there, that he would get his feet wet; that they then came back along the back entry from the water to the trap door, which was in the slant from the main entry; that they went up the main entry and down through a cross-cut to the face of the back entry, and up to the face of the main entry, and back through the face of all of the rooms on the fourth left, and then up to the third back entry and to the face of that back entry, through on the main entry and around the rooms there; that on the 27th of January, 1895, there was water in the fourth left air course, but he could not say how much, and that from that time until the explosion that air course was never free from water; that there was a syphon to drain the water out of that air course; that he never knew it to run between the 27th of January,
1895, and the explosion; that he could not tell how much
61 water there was in there immediately prior to the explo-
sion, but that there was quite a quantity; that it was somewhere around the neighborhood of between two hundred and three hundred feet in length; that that accumulation of water was in his way a little in the discharge of his duties as fire boss; that Donohue was the pit boss; that shortly before the explosion he told Donohue that he had too much work to do, if he would take that water out of there it would shorten his run, or else give him a man to hang canvas; that Donohue told him his orders were to hoist no water, but he would give him a man; that this was probably four or five days or a week before the explosion; that he did not give him a man; that the miners working on the fourth left entry had no means

of knowing of the water in the fourth left air course because it was not the way that they went in to work; that he did not remember ever seeing the book marked Exhibit "B;" that his duties as fire boss were to go to every place where men were working and see that it was safe before they went in; that it was one of his duties to attend to the hanging of brattice or canvas; that if he found gas in a place he would go back to where it would be safe for a miner with a naked light and put a fire-mark on a tie or shovel, over which a coal-digger would not go; that he usually told a man about gas in his place as he was going down; that it was the duty of the fire boss to see every miner as he went into the mine and tell
him whether or not his place was safe; that usually
62 when he had found gas he would give the coal-digger
a safety lamp unless there was a quantity, and then he told him to wait for the fire boss to come around whose duty it was to get the gas out; that there was no rule or custom in that mine known to miners whereby a dangerous quantity of explosive gas was permitted to accumulate in an open place in that mine and remain for as long as forty-eight hours protected only by a fire-mark; that he inspected the mine the last time before the explosion on Tuesday night; that he understood the map marked Exhibit "A" and could show on it the course which he took in making that inspection; that he started at the mouth of the main slope, came down to the lamp cabin on the left side and went into the first right and upon the plane, then to the face of the face of the first right, back to the main entry and down to the second; then he went in on the plane of the second. The witness then went on to describe his course of inspection throughout the mine, going into each place where men were working on the right side of the mine until he reached the foot of the main slope, and from there he came up the left side of the mine following substantially the same course as that described by the witness, Porterfield, as being the course of the air in its passage through the left side of the mine, but somewhat more in detail, the differences being that his inspection finished at the second left entry whence he passed out to the main slope, and also he shows that he did not pass through the fourth left air course although he did visit the face of that air course
by coming down from the main entry through a cross-
63 cut into the air course. The witness then testified that his
description was not accurate as to the inspection made by him on Tuesday night before the explosion because at that time he did not visit rooms 5, 6, 7, 8, 9, 10, and 11 on the fourth left entry because they were finished and as he had a lot of work to do he did not think it was necessary; that the last time before the explosion when he was at the face of room eight, was on Monday night; that he found no fire-mark in that room at that time, but he did find a little gas, extending back ten or eleven feet from the face, and he put fire-marks in the room, one above the cross-cut in room eight and one below the last cross-cut on the right; that in the way business was conducted in that mine none of the coal-diggers who were killed in the explosion had any knowledge or means of knowledge

of those fire-marks or any business to go into room eight or make any inquiry with reference thereto; that the coal-diggers in the mine relied on the fire boss for their safety; that they had no knowledge or means of knowledge as to how he performed his duties as fire boss; that the men on his shift were out of the mine at the time he made his inspection and came in from a quarter after six and until seven o'clock, while he generally completed his inspection from ten minutes before six to a quarter after six, the inspection beginning part of the time at two o'clock, but usually from three thirty to four o'clock; that the only means the miners on his shift had of knowing how he performed his duties was that some of the men on the other shift saw him going around
64 some time before they went off, some of the night men being at work when he made his inspection as day fire boss and some of the day men at work when he made his inspection as night fire boss; that after placing a fire-mark in the mine he generally visited it and if he could remove the gas would do so; that he did not visit the fire-mark in room eight between Monday night and the explosion and did not remove that gas because there was nobody working there and he was crowded with his work; that he told Mr. Donohue that there was a little more gas than usual in room eight; that he was not in room eight until probably a week after the explosion; that at the time of the explosion he was home in bed asleep; that as soon as he heard of the explosion he came to the mine and went down with Mr. Brown, pit boss at the hard-coal mine, to the fifth left and came up through number one room to the fourth left air course and tried to get in there and encountered the water; that they then went back to the fifth left and up the slope to the fourth left entry and put a brattice across the slope turning the air into the fourth left entry; that he went into the water in the fourth left air course up to his armpits; that by means of brattice they carried the air into the fourth left entry until they got past the water and then went down into the back entry with the brattice and carried the air on until they got to the break-through in front of 16 room and there they could not move the after damp; that they crawled through the break-through up to the main entry and there found the first body of a man whom he
65 knew as Whitey; that the next body was found in sixteen room and that was the body of Mr. Speight, which was burned on the hands and arms; that about this time Superintendent Duggan came in and said that somebody was rapping at the face of fourteen room and witness with three others volunteered to go up there, but by mistake got into room thirteen and there found McCart's body, which was not bruised or burned, and they took it out and sent it up on top; that he then went back again and was overcome by the after damp and that was the last he knew at that time.

Upon cross-examination by Mr. Twitchell the witness further testified that he was thirty-three years old in February, 1895, that he had worked in mines in the Indian Territory, first at Savanah No. 1, which was a very gassy mine and in which he worked only as a

miner; that he worked at Krebs in the Indian Territory, the first mine in which he worked there being gassy but not very bad; that he was assistant fire boss in number seven at that place, between four and six months; that he was familiar with explosive gases and understood the duties of the fire boss; that he performed those duties as well as he knew how; that he understood that the safety of the lives of the people working in the White Ash mine was dependent upon the performance of his duty, and if there had been any danger threatening those lives which he knew he would have remedied it; that the last inspection he made of room eight was on Monday evening; that it was not part of his duty
66 to inspect and report as to the air circulation, but it was his duty to put up curtains so as to throw what air was coming around the faces where there was gas, and that he always performed that duty; that the brattices in the rooms were put up by setting props of from four to eight inches thick and tacking canvas to them, the canvas extending from just below the cross-cut through which the air traveled across the road and then turning at right angles and going up to a point as near the face of the room as would be necessary, sometimes within four or six feet; that on the day of this last inspection of the fourth left the brattices were in position as near as they could put them, that if a piece of brattice fell down the fire bosses were immediately sent for to come and hang it; that the miners would usually send by a driver; that the miners were cognizant that it was his duty when he discovered explosive gases to mark them with fire-marks; that some of the men on the opposite shift could generally see him in the performance of his work; that he did not remember whether he was in room eight once or twice on the morning prior to the explosion; that if he so testified before the coroner's jury, it was true, as his memory was fresh at that time; that at time of his last inspection he went into the first right entry, that is, he went into the first place that was working on the right side of the mine, but it will probably be called the second right entry although he might have called it the first right in his direct testimony; that he did not remember whether he was in the third or fourth right on his last inspection or not,
67 but the fifth and sixth he could not miss as he made it a point to inspect every place that was apt to make gas; that he did not remember whether he found gas in room sixteen or in room twelve or in any of the rooms on the fourth left; that after finishing his inspection he would go out on the main slope to the fire boss' cabin, and that the miners had orders to pass that cabin on their way to work, and if any one tried to go down the back slope without passing the cabin and he found it out, he sent him home; that as the miners came in he advised each man as to the condition of his working place; that if there was a little gas in a man's place he would give him a safety lamp, and if he thought there was too much for a man to go in that didn't understand his business, he would tell him to wait at the switch until he, the witness, came up; that there were more workings just prior to the explosion than when he first went on as fire boss; that it was on

Monday evening or Tuesday evening when he told Donohue that room eight was making more gas than usual; that Donohue was day pit boss and his body was found in the cross-cut at 11 room, but he did not see him until after they had taken him out; that his last inspection of room eight was on Monday night, and at that time the brattice and curtains were in position and the last post towards the face of the room was about fifteen feet from the face; that the gas was between that post and the face, and was directly in the air current and extended across the face of the room; that he put his fire-
mark eight, ten or twelve feet above the last cross-cut. The
68 witness here made a diagram of the room, which was marked
Defendant's "Exhibit C," and described the same to the jury, saying that brattice extended from the lower edge of the cross-cut from B to E across the road and then up within fifteen feet of the face to T; that he put one fire-mark above the cross-cut at Q R and one below the cross-cut at O P; that he could not say exactly what these marks were, but his custom was to make them with three or four crosses, the word fire and the date; that such a mark meant that men should not go into the place so marked, and that was the means adopted in the White Ash mine to indicate to everybody that they should not pass a given point, and that fact was known to everybody working in the mine; that in the main entries curtains were hung across the entry for the purpose of forcing air up around the faces of the room, sometimes two or three hundred feet apart and sometimes only fifty; that there were stoppings in the cross-cuts between the fourth left main and back entries up to the last cross-cut; that he had seen the pipe of the syphon in the fourth left back entry going around a sharp corner to go down the hill; that as well as he could remember the syphon ran down through number one room of the fifth left; that he did not know how far the pipe extended, but was once at its lower end after the explosion; that before the explosion he had nothing to do with the pipe and that it might have been running prior to the explosion so far as he knew; that the slant of the coal was twelve to fourteen
degrees and any water in the fourth left entry would
69 naturally run back into the air course and accumulate
on the lower side; that he never traveled that air course only up to this one point and back, and from the slant into the face; that after the last time he was in room eight other persons may have gone there so far as his knowledge was concerned; that he knew the water in the air course was in the neighborhood of two to three hundred feet in length; that none of the rooms opposite the place where the water was, were working at the time of the explosion; that he could not say in minutes how much it would have shortened his work in making the inspection if the water had been taken out, but he explained by the map that when he came up number one room of the fifth left in to the back entry of the fourth left, he went on until he came to the water and then took the back track and went through the trap door on the slant up to the main entry; that it was not altogether on that account that he asked Donohue for an assistant, but it was one of the things,—he had too

much work to do; that Donohue when he showed him over the mine didn't go all over the right side of the mine with him, but did go all over the left side except the old workings, but did not show him every place where the men worked; that he could not tell just where he was on the Tuesday night before the explosion at midnight or at two o'clock, but he usually had his supper about twelve o'clock and then went to the cabin and cleaned lamps; that he came off duty about two o'clock and went to bed as soon as he could; that he never informed miners of the general condition of the
70 mine, but always notified them of their own places; that when he quit working prior to the explosion he had fulfilled his entire duty as he understood it as a fire boss.

On redirect examination by Mr. Field, the witness further testified that after the mine was double shifted the mine was properly inspected as far as he could do it; that in parts of that mine shots were fired after he made his inspections and that he did not return to inspect those places after the firing because he did not have time; that the reason he asked for assistance was that he could not properly perform his duty within the time allowed; that it would have been his duty after he discovered the gas in room eight, to carry the brattice up near enough to the face to cause the air to carry the gas out, but he never had time to do it; that he marked room eight because he knew that the air would not carry the gas out without a change of the brattice; that when he reported the gas to Donohue, he and everybody else relied upon the fact that Donohue would not send anybody into that room with a naked light until after the gas had been removed; that in the way that mine was run he was not compelled to go back to room eight after he put the fire-mark there; that when he discovered the gas and put the fire-mark he hadn't exactly done his duty, but had done it as far as he could; that if the syphon pipe run before the explosion where it did after it, he would have seen it. The witness further testified, being asked as to his testimony before the coroner's jury, that it was true that
71 he found gas in room eight ten or eleven feet back from the face on Monday night, that he went through room eight on Monday night to make sure whether there was a chalk mark or dead line on it, that he never saw any such mark except the one he put on, and that he put one mark ten or twelve feet above the cross-cut and one down across the main road.

Upon recross-examination by Mr. Twitchell, the witness testified that he would not have allowed any of the miners to go to work if he had believed any portion of the mine was dangerous.

Upon further examination by Mr. Field the witness testified that it was possible and probable that there were dangers in that mine of which the men who went in knew nothing whatever, but that it was safe as long as they kept away from room eight; that it was not safe if the air was shut off in the fourth left air course; that if there was no air the gas in room eight was liable to extend all over the mine and that he knew nothing about it after Monday night.

On further cross-examination by Mr. Twitchell, the witness testified that if the air was not shut off in the back air course the

mine would have been safe; that if there had been sufficient air there, there would have been no gas; that gas is lighter than air and seeks the high places in the room; and before any gas could have filled room eight it would have spread through every room along the entire entry.

Upon further examination by Mr. Field, the witness testified that he could tell this gas when he saw it by which he meant that
72 he had seen it in a safety lamp or had seen the flame which it produces; that the gas might creep along the high place in a room from the face to the neck, and that it would always go to the highest point.

On further cross-examination by Mr. Twitchell, the witness testified that after the gas filled up to the cross-cut it would naturally leak out and go to another high place; that he did not know that it was possible to see the gas with a naked light although he had heard people say they could, but that he thought a man who would do it would want to commit suicide very quick.

And afterwards on further examination by Mr. Field, the same witness testified that he found in room twelve of the fourth left entry after the explosion a cartridge loaded up and filled with powder, between two and two and a half feet long; that it was made on a cartridge stick, a piece of wood two and a half or three feet long and about two and a half inches in thickness; that the paper was rolled on that stick and filled with powder and it was set up against the coal where they had a hole drilled to put this cartridge in; that at the time of the explosion four men were at work in the fifth left entry and none of them were injured.

On cross-examination by Mr. Twitchell, the witness further testified that he did not know the names of the men working in the fifth left entry, but one of them was called Matt; that the paper which surrounded the cartridge was pretty thick paper; that the cartridge was leaning against the coal at the face of room twelve; and that the cross-cut between twelve and thirteen was
73 fifteen or twenty feet from the face; and between twelve and eleven about the same distance from the face; that this was from four to six days after the explosion and before the coroner's jury went out, and at that time the air was circulating through that room and through thirteen, fourteen, fifteen and sixteen.

On further examination, by Mr. Field, the witness testified that there were men at work in the fourth left on the plane, who came out of the mine uninjured.

J. C. PORTERFIELD, being called by the plaintiff, was examined by Mr. Field, and testified that he was present when the witness Ray testified to his course through the mine, and following him made measurements on the plat showing the distance which Ray traveled, and that the distance was just one hundred feet more than four and three-quarter miles.

On cross-examination by Mr. Twitchell, he corrected this statement of the distance and said that it would be four miles and

two thousand and sixty feet or a little less than four and two-fifth miles.

Plaintiff offered in evidence a safety lamp which had been identified by the witness Ray as the kind of lamp to which he referred in his evidence, and the lamp was admitted in evidence as Exhibit B.

74 JAMES MERCHANT, being called as a witness for plaintiff, was examined by Mr. Field and testified that in February, 1895, he was employed in the White Ash mine as boss driver and was in the mine at the time of the explosion; that he had been working from about the first of April of the year before, and had been boss driver from the first of January of that year; that he had ceased to work for defendant on the 17th of March, 1896; that his duties were to oversee the drivers, see that the coal came out and see after the men; that empty cars were put on the empty track of the parting and the drivers hauled them in with mules into the rooms and brought out loaded cars and put them on the load track; that they put the empties on the lower track and took the loads out on the upper track; that the rope was the cable which ran from the top of the mine down to the bottom and hauled the coal out, and it was operated by a hoist engine at the top; that there were twenty-three men killed by the explosion in the fourth left and one in the third left; that there were mules killed also; that Henri Deserant and his two sons, Henri and Jules, were working in the fourth left entry and were killed; that he thought they were at work in sixteen room; that at the time of the explosion he was at the bottom of the mine and after the explosion he went up to the fourth left and met some men, among whom were John Densmore and Dan. Gorman, and Densmore told him that there was an explosion and said that the trapper boy was all shot to pieces and they got canvas and wrapped the boy up and sent him out of the mine; that
75 he then went and got a safety lamp and with Densmore, Murphy and Gorman tried to go in the main entry, and went in about as far as number twelve room; that they were compelled to turn back and tried to get in through the back entry and they came to the water there and could not wade through it; that they then turned back and went into the top entry again and followed that until they passed the water that lay in the bottom entry, and then went through a cross-cut back into the bottom entry and followed it as far as they could without being overcome by the after damp; that he waded into water up to his waist or a little deeper; that he could not tell how long it took after he came back out of the water to go beyond the place where the water was; that there wasn't any air there at that time unless it was through leakages; but there must have been some air because if there was none at all they could not have existed; that they bratticed the cross-cuts which had been blown out until they came to the inside cross-cut from the back to the main entry; that they took out some of the men, and then he got sick from the effects of the damp and went home; that his duties as to getting water out of the mine were

to see that the rope-riders hauled water when they had no coal to haul; that he was on the day shift; that the water from the fourth left air course when it ran through the syphon pipe, ran down through room one of the fifth left and through the parallel slope to the bottom of the mine; that he thought the double shift was put to work about the first of the year; that he did not know when
76 the water had run through the syphon pipe before the explosion; that to make the syphon run it was necessary to fill it with water and then the valves at both ends would be opened and the water would run out; that he did not remember ever having seen the book marked Exhibit "B;" that it was the business of the rope-rider and the rustlers who work with him to haul the water out of the mine, and they generally had a man for the purpose of filling the tanks at the bottom of the mine called the water-baler; that about the time of the explosion there was a water-baler on the night shift, but he did not remember seeing any on the day shift; that he saw evidences of explosion on the plane of the fourth left; that some of the bodies taken out were badly burned and some were bruised and the pit boss had his head crushed; that he saw one man who was not bruised much and that was Sam. James; that he saw a cartridge of powder standing at the face of twelve room; that his immediate superior was John Donohue who is dead, and Donohue's superior was the superintendent Duggan.

On cross-examination by Mr. Twitchell, the witness testified that after the explosion it took until some time late in the afternoon to get air to the face of the fourth left; that they did not run the air in all the way along the main entry; that they stopped the cross-cuts between the main and back entries with curtains; that the stoppings in these cross-cuts were crushed and busted open so the air went through them, but they were not blown clear back into the entry; that he traveled
77 nearly all the distance between the water and the face of the entry; that they carried the air through the inside cross-cut where the cross-cut was crushed down and broken, from the main to the back entry through the cross-cut inside of the water; that the air was forced in from the main slope; that he saw Mr. Duggan there that afternoon; that he thought that the entries were double-shifted most of the time; that there — more men working on the left side than on the right at the time of the explosion; that it was claimed by the people who hauled the water out that the right side produced the most water; that he did not remember how much water had been hauled out within a week or ten days prior to the explosion; that they had taken out of that mine as high as forty trips on one shift of ten hours and the trips averaged from eight to twelve cars; that he did not remember how many cars of coal were coming out of the left side at the time of the explosion; that he thought on the right side, only the second right was working; that he would be in the fourth left from four to eight times a day; that on the morning of the explosion he was not any further in the fourth left than the double parting at the slope; that he remembered twenty-three men being in the fourth left, but he did not re-

member how many were on the plane in the fourth left; that he generally came to work about half past six in the morning; that John Deighton was the fire boss that morning; that he went into the main entry first immediately after the explosion and did not at that time go into room eight; that there was a fall of rock in the entry near
78 room eight about four feet high; that the body of the first man taken out was of Mr. White, the entryman; that all the stoppings in the cross-cuts between the back and main entries were smashed down and the air had busted them out, and that he had so testified on a former trial; that those cross-cuts were the height of the coal, and the coal ran from five to seven and a half feet, and the cross-cuts were as wide as the entries more or less, and were thirty feet in length; that the stoppings were generally made by setting a row of props across the narrowest place in the cross-cut and nailing lumber to them to try to make it air-tight, and if there was any dirt or rubbish in the entry, that would be pitched in against them; that there was very little water coming out near the time of the explosion on his shift; that some of the water was taken from the bottom of the mine and some from the sump near the sixth right; that the water coming out of the fourth left back entry syphon ran to the foot of the main slope; that he was sure of that for the reason that they were not allowed to run that water down there for fear of drowning out the slope men; that he did not remember that that water crossed the track to the right side of the mine; that at the time of the explosion he knew about the water, and where it went, but had since forgotten; that he had a conversation with Mr. Duggan in the fourth left about hearing somebody rapping from the third left; that there was a sump on the right side where they filled the water into tanks with pipes, and that he believed it was between the sixth and seventh rights; that the
79 syphon pipe was a two-inch pipe; that if any man started the syphon to running, and he went by it or was anywhere near that pipe, he would know it was running, but if the pipe was started when he was in some other part of the mine, he would not know anything about it; that there was a door from the slope to the fourth left which was kept closed to force the air down the slope; that in some places in the mine there was canvas hung across the entries; that the slope was running just before the explosion.

Upon redirect examination by Mr. Field, the witness further testified that his orders were not to haul water when he could get coal; that immediately after the explosion they were going to take air down the slope and bring it up through the fifth on its regular course, and that he said that they could not do it, as he didn't think they could take it through that swamp of water, but before he got back to the slope this purpose was changed, and the air was taken into the fourth left in place of the fifth; that company men are men who work by the day under the orders of the pit boss, and the coal miners who were paid by the ton are not company men; that the lower end of the syphon pipe was on the fifth left main entry, and after the water emptied out of the pipe, it ran away by itself;

that he could not remember when he had seen indications of the water having run there before the explosion.

On further cross-examination by Mr. Twitchell, the witness testified that by throwing the curtain across the main slope,
80 relief would be had in the fourth left quicker than in any other way; that he did not remember whether the door was blown open or not when he took up the body of the boy; that when he got to the boy he was on the outside of the door; that the boy's place of work was on both sides of the door, according to whether the driver was inside or outside; that by putting the curtain across the slope, they would get all the air that came down except the leakage through and around the canvas; that they found smoke everywhere inside of the door; that by turning the entire air current into the entry, they would get air to the place where the men had been working quicker than by carrying it around through the back entry.

Upon further examination by Mr. Field, the witness testified that the proposition that stopping the air across the slope and turning it into the fourth left entry, was the quickest way to get the air in, was based upon the assumption that there was something wrong with the air course; that all he knew about the air course was that he knew how deep he waded in the water and he could not see that there was any way of getting through.

On further examination by Mr. Twitchell the witness testified that the object of taking the air into the fourth left entry after the explosion was to clear that entry of noxious gases and they took all the air that they could get and took it the shortest way there was, but that the easiest way would have been to carry it through the fifth left and then up through its regular course and the
81 reason they fetched the air in the way they did was because they could not get through the air course of the fourth left.

JAMES C. PORTERFIELD being recalled, was examined by Mr. Field, and testified that he was working in room number seven of the second left entry at the time of the explosion; that at some time within two hours he was at the syphon pipe and he helped to carry water for a little while; that he was pouring water in the standpipe of the syphon and others were carrying the water; that he had seen that pipe running before the explosion, but could not tell how long before; that after the explosion he was at the lower end and turned on the valve and the syphon started running; that the book marked Exhibit "B" was kept in the office for men to sign when they went to work for the company, and was always spoken of as the contract, but that he had never looked the book over.

Plaintiff then offered in evidence rule number seventeen as contained in the book Exhibit "B," which rule was read to the jury and is as follows:

17.—*Report Unsafe Places.*

All employés are requested to report any unsafe place to the mine boss, who shall at once have the same repaired, and permit no one to enter therein until it is put in proper condition.

Reckless persons or those having no knowledge of mining,
82 will not be permitted in the mines. The mine boss will personally examine the mine and know that all parts thereof are in a safe condition.

PHILIP ROLANDO, being sworn as a witness for plaintiff, was examined by Mr. Clancy, and testi- that he lived in Madrid and was rope-rider at the White Ash coal mine; that his duties were to run the cars into the mine and pull loads out and haul water; that the cars were taken in and out by means of a cable which was connected with a hoist-engine at the mouth of the slope; that the cable would run only when there were cars ready to be taken out and that he notified the engineer by ringing a bell; that there was a coupling on the end of the cable to couple to the end of the cars; that prior to the explosion he hauled coal and water out of the mine; that there were water cars for the purpose of hauling water; that there were three or four places from which he hauled water; that they were what was called number one sump, the second cross-cut below the sixth right, number two slump at the eight- right, the seventh left from which there was a little water hauled, and the foot of the slope; that as far as he could remember there had been a double shift at work in the mine for about a month before the explosion; that after the mine was double-shifted there was a great deal less water hauled than before; that after the mine was double-shifted his orders were to hoist water when he had no coal to take out.

83 Upon cross-examination by Mr. Twitchell, the witness further testified that there was water made on both sides of the mine; that he could not say how much water was taken out per day during January or during the last week of January or during the first, second or third week of February, but that he knew very little came out in that month; that he knew nothing about what was done on the other shift; that before the explosion there was some men working on the right side of the mine, but the great majority were working on the left side; that he could not tell how many cars of coal he would haul out on a shift and he never kept track of it and was not required to make any report of it.

J. W. BECK, being sworn as a witness for plaintiff, was examined by Mr. Field, and testified that he was a miner and was employed during February, 1895, in the White Ash mine as a coal miner and had been so employed from about the fourth or fifth of January of the same year; that there was no rule or custom of operating that mine whereby a dangerous body of gas was allowed to accumulate in any open place in that mine and remain for as long as thirty-six or forty-eight hours protected only by a firemark; that he had worked in other mines; that the coal-diggers

in that mine relied for their safety upon the management of the mine, the pit bosses and the fire bosses; that they had no means of knowing the condition of the mine except through the pit boss or fire boss; that when he went to work on the day of the explosion he had no knowledge or means of
84 knowledge of any dangerous body of gas in the mine or of the fact that the fourth left air course was obstructed by water; that on the 27th of February, 1895, at about eleven o'clock he was at work at the face of room fifteen in the third left entry, when suddenly there was a gush of wind and immediately after everything seemed to move apparently and a solid pressure came on them; that they were perfectly deaf for a time and could hear nothing at all, just as when one puts his fingers in his ears, and this lasted for a minute or a minute and a half; that the men who were working in the next room came in and asked him what in the name of God was the matter and he told them he thought it was an explosion and was afraid somebody was burned; that they ran down to the entry and found two mules and a trip of cars, but could not find the driver; that they turned towards the slope and went as far as room thirteen where they met the after damp which is a substance left in the air after a gas explosion; that they could not endure that and he told the boys that he was afraid that they were cut off from the slope; that they then went up — room thirteen and through the top break-through into room twelve and crossed that room and went to the break-through to eleven and there met the after damp and were compelled to turn back; that they then went back to the entry and down into the air course and turned towards the slope in the air course which they followed until they were about opposite thirteen room and there met the after damp again; that this satisfied him that they
85 were cut off completely and he told the boys that there was no hope unless a rescuing party rescued them; that Stoops and Nash asked him what in the name of God they could do, and he told them the only thing would be to stay with some water which they had met in the air course, but they objected to that and wanted to try to get out and insisted on going to the top entry again and taking a car off the trip, run it back — the entry and try to follow it to the door; that he told them that they could not do it, but they would try it anyhow and he went back with them; that they got the car off and started with it and went into the after damp about fifteen feet when the car struck a little pile of rock and went off the track and they fell on their knees coughing and gasping for breath; that his son who was working with him had followed them and he went down to-; that he caught him up and got him back out of the after damp and called to Stoops and Nash for them to come back, and he took the boy and the others followed and they went to the water again where they took buckets and sprayed the roof and stayed until they were rescued; that the spraying of the roof was to purify the air as much as they could; that they were in there from three to three and a half hours; that while part of them was spraying the roof the others were drumming on the brattice to at-

tract attention; that the mules were dead when they came out and he was told that the driver was picked up near room twelve, dead; that after damp is called choke damp by the miners and is a smoky, hazy kind of a fog, and the moment you get into it, it cuts your
86 breath from you, chokes you right down; that he had encountered after damp frequently before that time and had been working in gaseous mines for about twenty years before; that in the White Ash mine miners in the entries were allowed to fire shots at nine in the morning, at twelve noon and at three in the afternoon, and in the rooms at noon and night; that he had heard shots at nine o'clock on the morning of the explosion and he heard no other shots after the nine o'clock firing; that if there had been any shot fired in the fourth left entry or in any of its rooms he would have heard it, and there was not at the time of the explosion any noise or report such as accompanies the explosion of gunpowder.

Upon cross-examination by Mr. Twitchell, the witness testified that he had been working in gaseous mines ever since March, 1877; that he had been in mines when explosions occurred; that he had his hair singed by the burning of gas; that he had found gas in the White Ash mine and lit it; that he worked in only one place in the White Ash mine; that he knew none of the people working in the fourth left entry and never had been in that entry; that he was at the face of the room when the explosion occurred; that the room was canvassed up to within probably twenty feet of the face; that when he and the others were throwing the water up against the roof was opposite the mouth of fifteen room; that the water was probably two and a half or three feet deep and probably fifty feet in length.

87 Upon further examination by Mr. Field, the witness stated that he did not know of the water in the third left air course before he started to find his way out after the explosion.

Paul Wunschmann being sworn, was examined by Mr. Clancy and testified that his occupation was that of insurance agent and that in his business he had had occasion to familiarize himself with tables showing the expectation of life, and he produced copies of the American mortality tables, American Experience table of mortality and a table of life-annuity rates, and stated that these were in use by standard life insurance companies; that a person fifty-three years of age will live, according to the American mortality table, 18.79 years longer, and to buy for that length of time, an annuity of nine hundred dollars per year will require $11,094.30; that a person seventeen years of age, according to the same table, is expected to live 44.19 years longer, and the amount required to purchase an annuity for that length of time of six hundred dollars a year, is $11,263.80; that a person fifteen years old is expected to live forty-five and one-half years, and to buy an annuity of $450.00 for that time will require $8,563.05.

Plaintiff then offered in evidence the American Experience table of mortality which appears as table number 17 in a book entitled

"The Three Systems of Life Insurance," by Mervin Tabor, and also the table of life-annuity rates for males, which appears at pages 174 and 175 of a book entitled "Approximate Illustrations," printed for the use of agents of Mutual Life Insurance Company of New
88 York, which tables were admitted in evidence as Exhibits C and D, and of which so much as is material in this case is as follows:

EXHIBIT C.

Table No. 17, American Experience Table of Mortality.

Age.	Number living.	Deaths each yr.	Per ct. of deaths to the living.	Expectation of life.	Net premiums, American 4 per ct.	
					Level ann. prem. to insure $1,000 for life.	Natural prem. to insure $1,000 a year.
15	96,285	735	.007634	45.50	11.47	7.34
17	94,818	729	.007688	44.19	11.91	7.39
53	66,797	1,091	.016333	18.79	38.79	15.71

EXHIBIT D.

Life Annuity Rates—Males.

July 1, 1892.

Age last birthd'y.	Price of $100 annuity.			Annuity purchased by $1,000.		
	1 $100	2 $50	3 $25	4 Annual paym't.	5 Semi-an. paym't.	6 Quarterly paym't.
15.....	1,902.90	1,927.90	1,940.40	52.55	25.93	12.88
17.....	1,877.30	1,902.30	1,914.80	53.26	26.28	13.05
53.....	1,232.70	1,257.70	1,270.20	81.12	39.75	19.68

The witness further testified that he had examined the table of life annuities which appears in the printed rules of the supreme court of the Territory and had made calculations based on that table showing that it would take $9,908.10 to purchase an annuity of $900 for life for a man at the age of fifty-three, that it would
89 take $9,037.20 to purchase a life annuity of $600 for a man at the age of seventeen, and $6,811.65 to purchase a life annuity of $450 a year for a boy of fifteen years of age.

Plaintiff then offered in evidence the table of life annuity which appears at page 35 of the printed rules for practice in the district courts of this Territory, which was admitted as Exhibit E, and of which so much as is material to this case is as follows:

EXHIBIT E.

Life Annuities—First Payment Immediate.

Age.	Value.
15	$15,137
17	15,062
53	11,009

To ascertain the value of the annuity, calculate the interest on the principal at six per cent. for one year and multiply that amount by the value in the foregoing table set opposite the age of the person interested. If the first payment is to be made at the end of one year from the time the calculation is made, the value must be taken at one unit less than as given in the table.

On cross-examination by Mr. Twitchell, the witness testified that the purchase price of a life annuity of $150 for a man fifty-three years of age, would be $1,849.05, and of a life annuity of $100 at the same age, $1,232.70, and of a life annuity of $400 for a man at the age of seventeen, $7,509.20, and for an annuity of $100 at the age of seventeen, $1,877.30, and for an annuity of $100 at the age of fifteen, $1,902.90.

90 LINA KELLY, being sworn as a witness for plaintiff, was examined by Mr. Field and testified that she was the mother of Alejandro Kelly who was killed in the White Ash mine in February, 1895; that he had worked in that mine for two months and was twenty-seven years of age; that from the waist up his body was burned, both hands and both arms were burned; that on the right side of the head he had a large hole and on the left side of the forehead he had a hole about the center, and both legs were broken so that they were unable to dress him.

O. W. ALEXANDER, being sworn as a witness for plaintiff, was examined by Mr. Field and testified that he had lived at Cerrillos eighteen or nineteen years and was engaged in all kinds of mining, and had had seven or eight years' experience in operating coal mines; that he had been in coal mines two different times after explosions, the first time in 1875 in Iowa, and the second in 1895 in the White Ash mine which he visited as a coroner's juror investigating the cause of the deaths of twenty-four men who had been killed in the explosion of February 27, 1895; that he went into the mine as a member of that jury a few days after the explosion and went down the main slope to a set of entries they called number five and from there up into number four; that there were six jurors of whom he remembers three, himself, Mr. Green and Mr. Rogers, and they were conducted through the mine by Mr. Fletcher and Mr. Duggan and another person whose name he thought was Ray; that they
91 traversed the fourth left back entry until they came to an obstruction which was a body of water, which he tried to go through and waded in until the water began to run over the tops of his boots and estimated that he was not half through when he

turned and came out; that the boots were wading boots which came up twenty-six or twenty-seven inches; that at the point where he turned to come back the entry appeared about four feet wide at the top; that they then passed through the pillars to another entry parallel and passed along that entry until they reached another cross-cut or slant by which they went down to the back entry again and followed it to its end; that they then crossed through the pillar again and went into the last working room, from which they went to the adjoining room and continued their inspection from room to room until they arrived at room eight and then went out of the mine; that between room eight and the last working room he saw evidences of a terrific explosion, there being rags of canvas, pieces of rope, pieces of lumber, miners' tool boxes and tools and dinner pails in confusion as if thrown about violently by a great power, and also evidences of fire on posts and timber in the mine, charred bark on the timbers, and a strong smell of burnt rag and timbers; that from his experence and from what he saw at that time he could and did form an opinion as to the cause of that explosion and where it originated, and that opinion was that the explosion was caused by the ignition of fire-damp and that it originated in room number eight of the fourth left entry.

92 Upon cross-examination by Mr. Twitchell, the witness further testified that he had investigated the causes of gas explosion in a coal mine in the town of Boone in Iowa in the year 1875, and that at different times he had had occasion to investigate gases in other mines; that the gas which exploded in the White Ash mine was what is commonly called fire-damp, and that it was an explosion of fire-damp was shown by the tremendous force with which everything in that part of the mine had been thrown about, he previously knowing of the presence of fire-damp in that mine; that it was his judgment that it was impossible to have had any other kind of explosion in that entry except a gas explosion; that he knew before he went in there to make the inspection, that there had been an explosion of gas because he had viewed the remains of the men that were taken out; that it was about a year previous to the explosion that he had been in the White Ash mine; that he estimated the distance across the back entry at one place in particular, but that he could estimate pretty close and that he had a good eye; that he also estimated the height of the entry to be about six feet in the highest place and the width from nine to twelve feet on the bottom; that they went through every portion of the back entry except where the water was; that the air was passing through the air course and from the air course to the last cross-cut between the back and top entry; that he saw Mr. Fleming make a measurement of the air in the last cross-cut; that he went to the face of the fourth left entry and the air was being conducted up to

93 within a short distance of the face by means of curtains; that he did not know the number of the first rooms he went into, but he was in all of the rooms between room eight and the end of the entry; that they followed the course of the air through the rooms as far as room eight; that they had safety lamps, but he

made no inspection for gas; that the lamp already offered in evidence was a gauze safety lamp used for detecting the presence of gas, but not usually used by miners in their ordinary work; that the presence of gas could be detected by the lamp down to about four per cent. when a blue cap would form on top of the blaze in the lamp; that he made examination in room eight for evidences of an explosion below the face of the room; that the props were charred on the side toward room nine and slightly charred on the side toward room seven, but the main evidences of fire were on the side towards room nine; that he did not go up to the face room eight, but he did pass around the curtain taking no notice of the proximity of the face of the working; that in room nine they found canvas sprung and twisted around the timber; that he did not recollect any room that he went into where there were not curtains up to the face; that in room twelve the force of the explosion seemed to have been stronger; that to the best of his recollection the greatest force was spent in rooms sixteen and seventeen or fifteen and sixteen; that he saw no coal which had been coked; that when they went around the water some one remained at the south end of the pool with a light but he could not see the light directly over
94 the water, but only the reflection of the light on the water on account of the roof and the bottom of the entry forming a depression; that he found no evidences of exploded powder; that he found powder cans that were flattened up which might have been done by being thrown against a rib or against the timbers, but they did not show any evidence of having been exploded by powder from the inside; that he had worked in coal mines at Cerrillos, in his own mine more than anybody else's, but he had never worked in a mine there ventilated by a fan; that he had done but little work for the defendant and that only in the capacity of a contractor at the coke oven.

JAMES DUGGAN being sworn as a witness for plaintiff, was examined by Mr. Field, and testified that after the explosion and until the coroner's jury went into the mine he was in charge of the property and that he and the other agents and servants of the defendant excluded all other persons therefrom; that there was an interval of four days between the explosion and the going down of the coroner's jury, which went down on the fourth of March; that with the coroner's jury there went down Mr. Fletcher, Fleming, Alexander, Leaden, Rogers, Green, and himself, and that he did not remember the names of the others.

Counsel for plaintiff then proceeded to read under agreement with counsel for defendant, the evidence of THOMAS LEADEN,
95 who had testified as a witness for plaintiff on a former trial of this cause, on which former trial, being examined by Mr. Field, the said witness testified that he lived two miles north from Gallup and had been a coal miner about nineteen years; that in February, 1895, he was a member of the legislature at Santa Fé and was appointed as a member of a committee to investigate the

cause of the White Ash Mine disaster; that he had previously worked in that mine and was familiar with its underground workings as far as they had gone when he worked there, and he then proceeded to make a diagram on a blackboard of the underground workings of that mine so far as he was familiar with them and particularly of the fourth left entry. The witness further testified that he worked in that mine from May to August, 1893, and then went to the opening of the Cherokee strip and afterwards returned; that he then started to work in the fourth right and drove a slant and then went to work on the driving of the slope air courses on the left side of the slope and the fourth left entry was driven about thirty feet and was full of water; that he worked until about the twenty-third of January, 1894; that the mine was supplied with air by a fan; that the air comes down the slope and continues to the bottom where it splits part going to the right and part to the left, when it comes back and returns by the slope parallel through the works below the fifth and then up to the fifth left air course; that the slope is the main opening in which there is a track to hoist the coal out of the mine in cars, and the slope par-
allel or slope air course is driven along with the slope
96 for ventilation, and about every two hundred and fifty or
three hundred feet entries are driven, and one air course with each entry to carry air, the air being necessary for the men to live and to keep gases out. The witness then proceeded to explain the diagram which he had made on the blackboard, which explanation is omitted, the diagram not having been preserved. The witness further testified that when he went into the mine with the coroner's inquest, it must have been five or six days after the explosion; that they went to the bottom of the slope and came up through a room to the fourth left air course, and in that room they could see where water ran down and there were timbers, ties and things lying in the air course, washed down by the water, and they went along the air course about a hundred and fifty feet until they came to the water; that there was water in the air course through which they did not go, but some of the persons waded into the water up to their boot tops and then they went around; that one man stayed on this side and shined a light and they could look across the water and see the light, which he judged to be about three hundred feet distant; that there was a water mark on the low side of the air course which showed where the water had been, and was all along the low side of the air course about three inches from the roof; that the air course was from five to five and a half feet high, and about nine feet wide, except at the fault, where it was about six feet; that he went into room eighteen and then through all the rooms,
one cross cut to another, as far as room eight, and then they came
97 down out of eight and went into another room and then
came out through the entry to the main slope and went upon top; that the filling of the air course with water was what caused the accident; that the water extended for five or six hundred feet and it seemed to be all one body of water; that the water which they could not get past was about three hundred feet long, but there

was water laying back on the low side; that there was a fault in the air course which made a sag in both the top and bottom of the air course; that after he went into the mine after the explosion, Fletcher, Duggan, Brown and the coroner's jury went in; that there were six of the jury whom he remembered, Alexander, Rogers, Miller and Green, and Kinsell, the justice of the peace, also went in; that Fletcher was inspector of mines for the Santa Fé company; that he met at bottom Archie Chambers, the fire boss; that Brown had charge of the mine at the time of the examination and before the explosion he was boss of the hard-coal mine; that they came down to the second left to the fire station, where Mr. Brown gave them all lamps, and they went down to the fifth left and went through the door and up through a room into the fourth left air course, and he went back along the air course about a hundred and fifty feet to the water, and Alexander walked into the water to the tops of his boots, and then they returned and went up into the fourth left entry and went past the water and came down in the air course and Chambers held a light on this side and they saw the light across the water; that where Alexander went in it was about three and a half feet from his boots to the top;
98 that as Alexander waded in the water it was bound to get deeper as it was a natural swamp and he was on the upper edge; that after they looked across the water they went up into the main entry and some of the party went to the face of the entry, and he went into room eighteen, where there was a machine with which men had been drilling a hole, and then he came out of that room and saw other parties in the entry, which was driven on further ahead, and then they came back and went through all the rooms as far as room eight; that there was no other air course to supply air to the fourth left entry and the rooms on that entry; except the fourth left air course, but there might be leakage through some of the stoppings, and there would be more or less, but the main air came through the air course; that if the fourth left air course got filled with water there would not be any air to get into the entry, except what would leak through the break-throughs; that Fletcher or Duggan or Brown, said that they found the body of a boy at the door, and some of them said it was between the door and the slope, and Mr. Fleming took notes of where the bodies were found; that Brown said Roy Phillips was found in room eighteen; that he knew that fire-damp would burn one if it would explode, and he knew there was gas on the left side of the mine because there was gas in the first left entry when he was driving it, and there was gas in the slope air course when he was driving that; that when he worked in the fourth left it was started off the slope a short way, and he drove it about forty feet further
99 down and then drove the parallel of the slope back up the hill; that the fourth left entry came down on a slant so that the trip could come in; that the trip is ten or twelve cars, which hold about a ton and a half; that while he was at work there, they had water because they were driving down a pitch, and the water

would naturally run there; that he drove that slant down about eighty or ninety feet.

Upon cross-examination by Mr. Twitchell, the witness testified that the length of water in the air course was three hundred feet on the high side, but more on the low side; that the air came in at the mouth of the slope and split at the foot of the slope, one-half going to the right and one-half to the left, as near as they could get it, and then the air returns in the way he had pointed out and supplied the men and animals working on each level; that the air must be supplied to people at the face of the entry before it could be supplied to the men working on the plane on the fourth left, if it were going its right course, and after supplying the men on the plane, the air went to the men on the third left entry; that if the stoppings and brattices along the course of the air were in proper condition, the necessary amount of air would be carried from the fourth left air course, but there would always be some leakage; that if the fourth left air course became full of water or nearly full, that would have a tendency to make the leakage back through the canvas and the cross-cuts on the outside of the water all the greater and by this means air might reach people working on the second left at the time of the ex-
100 plosion; that it would be impossible for the air to escape through the stoppings if they were built with brick and mortar, but if built with refuse out of the mine it would be impossible almost to make them air-tight; that the air in its course through the left side of the mine, if everything was in good condition, would gather up all the impurities and gases in its course, and the air in the second left air course would have more impurities than it would on the fourth left air course, because it has a longer road to travel and picks up the impurities as it travels; that air following the suction caused by an exhaust fan will take the shortest course, and the air coming up into the fourth left air course would certainly travel to the face of the fourth left entry as long as there was not some obstruction in the air course; that the White Ash mine was what would be called a wet mine; that all of the works of the mine are not wet, but there is considerable water in the mine; that the map which he made was made from what he saw of the fourth left in traveling through it after the explosion and that they were down in the mine about three hours.

Upon redirect examination by Mr. Field, the witness testified that the stoppings were not in what he would call good condition at the time he worked in the mine; that if at the time the explosion occurred there had been no obstruction whatever in the air course the effect of the explosion would have continued on down to the levels below, because when the explosion occurred it flew against the air; that it had to fly against the air to allow it
101 to explode, and in his experience when explosions start they always fly against the air; that the explosion occurred in the fourth left and flew against the air and encountering the water blew out the stoppings, but if the obstruction had not been there it would have gone down to the fifth or sixth before it got out on the

slope, and if the after damp killed a man and two mules in the third left entry and did no damage to men or animals below the fourth left entry, that fact indicated an obstruction in the fourth left air course at the time of the explosion.

Upon recross-examination by Mr. Twitchell, the witness further testified that the explosion didn't reach the third left entry; that there was not any obstruction in the rooms between room eight and the rooms on the plane of the fourth left, but the explosion would naturally fly against the air and it would be coming with the air if it flew back that way; that the explosion started in room eight and flew back through all the cross-cuts, and they found burnt props showing it flew back that way to where the air was coming; that if there was an obstruction in the fourth left air course, it would cause some of the air to leak through the stoppings, and it would come through on the plane and never reach where the explosion started in room eight.

Counsel for plaintiff also read under the same agreement with counsel for defendant the further evidence of the said THOMAS LEADEN testifying as a witness for plaintiff in rebuttal on the said former trial of this cause, on which former trial
102 being examined by Mr. Field, the said witness further testified that he had had considerable experience in exploded mines, that he had been engaged in rescuing parties that had been killed in the Savannah explosion in the Indian Territory about the year 1887, and that he had had experience in explosions at Rich Hill, Missouri; that in his examination of the fourth left entry of the White Ash mine, he examined the air course and found water there and went to the face of the entry, and examined the rooms, tracing the course of the explosion; that they started at about room number eighteen, but he did not go to the face of the entry; that they examined all the rooms from eighteen to the cross-cut between seven and eight and saw some holes drilled that had not been fired and found no shots that had been fired that left any holes; that there was one shot in room eighteen where there was about four or five inches of the hole left; that they examined the props along the course of the explosion where the flames had come and they found some of them burned all around, and they found props burned all along where the flame came through the cross-cuts, up to room eight; that in some of the rooms the props were not burned at the face, but were burned a little way above the cross-cut where the main course of the explosion went, and in number eight they were burned above the cross-cut about fifty feet; that from his experience and examination he was able to express an opinion as to the cause of the explosion and where it originated, and that it originated in room number eight where the gas
103 was lighted by a naked lamp by a man that went up the room; that he knew what a gunning shot or a windy shot was; that there is a difference between a gunning shot and a windy shot; that a gunning shot blows the tamping out and a windy shot is one that creates a terrible wind in the mine; that he found no indication that there had been a gunning shot in the fourth left

entry; that a windy shot would make a noise that makes a concussion in the air, makes the air wave backward and forward, while a gunning shot sometimes makes a sharp and loud report, sometimes louder than the reports of ordinary shots; that a gas explosion does not make a loud noise; that if the explosion had been occasioned by a gunning shot, the report of the gunning shot would have been loud, but if it was just a gas explosion it woutd be a kind of a dead sound; that when the force of the explosion started back it displaced the air and had to get out the best way it could; that there was no trace of any flame from room number eight towards the slope.

Upon cross-examination by Mr. Twitchell, the witness further testified that there was no indication of flame on the side of room eight towards the slope; that he examined the face of number eight, and there was indication of flame for about fifty feet from the last cross-cut up towards the face; that is was more than fifty feet from that cross-cut to the face; that if there was a body of gas in room eight it was against the face; that he examined all of the
props in room eight for more than fifty feet above the
104 cross-cut and there was scorch on the props on the side
towards the slope; that the only place where he examined the coal on the side of room eight towards the slope was at the cross-cut leading into room seven; that the flame extended in room eight below the cross-cut about twenty-five feet, that is the props were burned, but it did not extend to the entry as it would have had to go about one hundred and twenty-five feet to get there; that there was indication of flame in rooms eighteen, seventeen, eight, fifteen, twelve, eleven and ten, but there was no indication of flame at the neck of room eight; that the force of the explosion did not go to the plane instead of to the face of the entry because it was a gas explosion which goes against the air, and there must have been some air coming around in the direction of room eight; that there certainly is flame when there is a gas explosion; that he never heard of choke-damp exploding; that he saw Fleming take his instrument to take the measurement of the air, but he, witness, went on when Fleming stopped to take the measurement.

On redirect examination by Mr. Field, the witness further testified that the flame did not go up against the face of room eight because the gas had accumulated and came down and there wasn't very much air going into room eight and it wasn't enough for the gas to burn and when it was lighted it flew out and didn't go up to the face of the room.

Upon recross-examination by Mr. Twitchell, the witness further
testified that there was a large body of gas in room eight in
105 his opinion and it laid on the outer edge of the air, and it
burned until it burned all the air of the room and it didn't reach the face, and the gas flew to the air, and flew out of there and back to the face of the entry through the cross-entries.

(This closes plaintiff's case.)

Mr. FIELD: That is the case for the plaintiff.

JOSEPH FLETCHER, being called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age, and occupation.
A. Joseph Fletcher; age 42; occupation, mine superintendent and inspector.
Q. In whose employ are you now?
A. Charles J. Devlin's.
Q. Where are you employed and in what capacity?
A. In Frontenac, Crawford county, Kansas; acting superintendent or superintendent.
Q. Superintendent of what?
A. Frontenac and Chicopee property.
Q. What kind of properties are they?
A. Coal properties.
Q. About how many men have you engaged under you?
A. From 700 to 800.
106 Q. How many years have you been engaged with coal mines?
A. About 32 years.
Q. Where have you been employed and in what capacity during that time?
A. Well, I started as a boy in Europe. Came to this country and worked in Illinois, Iowa, through Missouri, Kansas, Colorado, New Mexico, also Arizona.
Q. Do you know the Cerrillos coal fields, Mr. Fletcher?
A. Yes, sir.
Q. When did you first know the Cerrillos coal fields?
A. It would be about '92, I should judge.
Q. What was your connection with them at that time?
A. I was mine inspector for the Santa Fé system.
Q. Well, do you know a mine at Madrid near Cerrillos called the White Ash mine?
A. Yes, sir.
Q. When did you first know that property, Mr. Fletcher?
A. In '92, these openings were opened there, in operation rather.
Q. Did you make an inspection of that mine at that time?

Mr. FIELD: Objected to as immaterial, irrelevant and incompetent.

Objection withdrawn.

107 A. I inspected all the properties that were in operation in Cerrillos and up in the Madrid district at that time.
Q. How long at that time had you been a mine inspector for the Santa Fé company?
A. I had been about three years previous to that.
Q. Now what various positions have you held in your connection with coal mines?
A. Well, from trapper, driver, miner, mine foreman, mine superintendent, and mine inspector.

Q. State whether or not from your experience with coal mines, as trapper, driver, miner, inspector and superintendent, and the other positions you have held and occupied, you are competent to give an opinion as to the causes of an explosion.

A. Yes, sir.

Q. Where were you on the 27th day of February, 1895?

A. Topeka, Kansas.

Q. How long after the 27th day of February, 1895, were you in Cerrillos or Madrid, if you were there?

A. I got to Madrid as quick as steam could carry me.

Q. What day did you arrive at Madrid?

A. I think it was Friday following the explosion.

Q. Well, when you got there what, if anything, did you do with reference to the inspection of the White Ash mine?

A. Well, I arrived there at night; next morning I went into the mine.

108 Q. Now, state what you did when you went into the mine on that morning and what you found.

A. Well, I secured a lamp, that is a safety lamp; I started down the mine alone and reached the 4th left. There was a curtain hanging across the main entry or main slope, which was acting as a regulator, had been acting as a regulator——

Mr. FIELD: Object to the testimony of the witness as to what the curtain had been doing.

The COURT: The witness may confine himself when he went in to what he saw, as to that particular question.

Q. Go ahead and state what you did when you went in and what you found?

A. I went through the door on the 4th left and reached as far as either 12 or 14 room, 14, I think, but hearing — I halloaed "Brown," who I was informed was in charge, but I got no answer, and knowing that they were putting up brattice and repairing stoppings, I didn't know just how they were about the air course and returned back to the main slope. I stayed there a few minutes and made up my mind I would go in as I knew they were in the inside; I started in and reached No. 16 room, now I think it was 14—it was 16 room, I think—and heard the men working; I went up the room where the parties were; that is, I think, Mr. Brown and Mr. Chambers and Mr. Ray and Deighton and Merchant—I think Merchant was there. I examined the place; saw that they were putting up the brattice and then returned down the room with Mr. Brown.

Q. Down 16 room?

109 A. Yes.

Q. Did you make an inspection of 16 room at that time?

A. No, sir, not at that time as the brattice was not up to the face.

Q. Tell exactly what you did do.

A. We came down onto the fourth left entry and went right into the face of the mine; we examined the places there and found that there was nothing in there, that is gas. I came out and came on

top. I think in the afternoon—this was in the forenoon; after dinner I went down again and they had got back somewhere to about 12 room, canvassed back. I went through the rooms on the inside with Mr. Brown. There was a car off the track on this side of the cross-cut between the 3d and 4th left, or it was the last cross-cut at the face; I went up into 18 room, I think 18 just had its neck turned but had no cross-cut in the room 17. I came down and went up 17 and there was a shot that had been fired there. I examined closely in that room. Now I think it was either 17 or 18, I would not swear positively, but there was a shot there in the bottom of the hole, it had been left in there, there was very little coal in the room; there was a cross-cut between 17 and 16 and we went up to the face of 16 and came back. We went into 15 and came back to the cross-cuts. We went into 12 and came back through the cross-cut. I went up that afternoon and I went down. I think it was the following Monday. Now, if the men were
110 working on Sunday I was down Sunday. I was down every day up to the time I was called for the inquest.

Q. Did you attend the coroner's inquest?

A. Yes.

Q. Did you go into the mine with the coroner's jury?

A. Yes.

Q. What time of the day did you go into the mine with the coroner's jury and who were with you?

A. It was in a forenoon. I could not exactly state the time, but there was Mr. Brown, Mr. Duggan, Mr. Leaden, and myself, and Mr. Rogers, who was a juror, and Mr. Alexander and Mr. Green, Mr. Miller, and some other gentleman that I didn't know that was taken a little sick. He didn't go around all the time I did. Also Mr. Fleming, who is territorial mine inspector.

Q. Tell the jury just exactly what you did when you went down with the coroner's jury and what you found, what evidences of explosion, if any, you found in any part of the 4th left entry or in any of the rooms and all about your actions and inspections on that day with that party.

A. We started into the mine together at or near the overcast. Mr. Fleming took the air current that morning.

Q. Point out on the map, Mr. Fletcher, just where he took that first measurement.

A. It was at this point (indicating the overcast).

Q. Tell the jury just how Mr. Fleming took the air meas-
111 urement at that point. Describe it minutely to the jury so that each one of them will understand it?

A. Well, he has an instrument called the anemometer, which has figures around the face like a watch face or clock face and there are fins similar to a little fan which held against the current, with its face towards the current, the action of the air circulates the fins and every time these turn *or* it makes a revolution or counts one on the dial which is a cubic foot. If the anemometer should read 100 revolutions and the area should be 70 feet that is the superficial feet of the slope, why it would be 7,000 feet that was traveling. If it

would register 1,000 it would be 70,000. We went on down the slope until we came about the point of the 6th right where he took another reading. Then we went into the 6th, that is, in the 6th left, we came up this plane, came up through this cross-cut went right along this face, came back around the 5th, came up through here on the back slope, left back slope, or No. 1 rather, it was at that time, into the 4th back entry. We took a reading in the back slope between the 5th and 4th.

Q. Do you know how much that was?

Objected to.

Q. Who took the reading, you and Mr. Fleming, or Mr. Fleming by himself?

A. Mr. Fleming held the anemometer, I held the watch, also Mr. Porterfield, I think was with us.

Q. Do you know what the air reading was there at that time?

A. I could not tell you.

112 Q. Have you got a memorandum of it?

A. I haven't, but Mr. Duggan should have.

Q. Did you make a memorandum of it at the time?

A. I did, I figured the cubic contents at the times he gave me the reading, but I have the paper.

Q. Did you give it to Mr. Duggan, or what did you do with it?

A. It may be with my own papers. We came into the 4th left back entry and we took a reading again in the back entry. I recollect the reading that was made there within a few feet of it at the 4th left back entry, just about 12 feet from where room No. 1 connected with the 4th left back entry.

Q. Room No. 1 of the 5th?

A. Yes, sir.

Q. How much was that reading?

A. She was somewhere between 4,700 and 4,900 feet, between 4,000 and 5,000 feet. We started on to where there was a little depression in the entry. There was a little water. There was some of the jurors, one or two of them started, went in, the others made remarks that they would not walk through. We turned back and went through a cross-cut on to the 3d. Then we took the 3d main cross-entry, I think it was the second cross-cut inside of the hauling cross-cut to the back entry. I can explain it a little more plainer. Here is the hauling cross-cut that they use to haul the coal out on, when the back entry was driven.

Q. What they called "a slant," wasn't it?

113 A. Yes, sir. When we went through the cross-cut on the inside, the 2d cross cut we turned and came back to this water edge. We left a man on the opposite side to prove to these fellows that the air course was opened, so that he could hold his light. We saw the light from the inside where the water was in the back entry. I think Mr. Alexander was the man that went in on both ends. We then took the back entry right clear through to the last cross cut. Then we took a reading at the last cross-cut.

Q. Just a moment before that reading in the last cross-cut. Tell

the jury, Mr. Fletcher, what was the condition of the stoppings in the cross-cuts or brattice in the cross-cuts between the main and back entries of the 4th left at the time that you were in there with the coroner's jury. The stoppings that had been there prior to the explosion, I mean.

A. They had all been blown out down on to the 3d or on to the back entry. On the 4th left there was cans, debris, props all scattered along the entry. There was also other little depressions going in as we went in through the entry where there was a little water standing, say from 6 to 8 inches deep. These cross-cuts had not been repaired at this time.

Q. What had been put up there in order to take the air up to the face?

A. Canvas.

Q. Now, before we go any further, I want to dispose of that part of the case. Were you familiar with the stoppings between
114 the main and back entries of the 4th left as they existed prior to the explosion?

A. Yes.

Q. Using the map, tell the jury how many of these stoppings there were?

A. Well, there was one, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21.

Q. Prior to the explosion, do you know whether or not all of these cross-cuts were closed up except the last one at the face of the entry?

A. Yes; they generally were.

Q. What was the character now of the stoppings in these cross-cuts?

A. Well, they generally make a little cutting in each side of the rib or each side of the cross-cut in the center of the cross-cut. They would set three props, one on each side and generally one in the middle that would be from top to bottom.

Q. On one side or both sides?

A. If they put the props on the lower side they would nail a board on the other side. They would cut the coal even. Then all the cross-cuts were filled up with dirt on both sides of the wood brattice.

Q. Now how long were each one of the cross-cuts, that is, what was the distance between the main and back entries?

A. I think she is a 30-foot pillar, if I am not mistaken.

Q. What was the width of the cross-cut?

115 A. Well, she was driven 8 feet wide and the thickness of the coal, 6 x 8; if it was seven, it would be 7 x 8.

Q. At the time you went down there with the coroner's jury and the time prior to your going there with the coroner's jury, state what had become of these stoppings which were in these cross-cuts.

A. These stoppings were all blown down from the 4th left into the 3d left back entry.

Q. Do you mean the 4th left back entry?

A. I mean from the 4th——

Mr. FIELD: Object to the gentleman leading the witness.

A. From the 4th left front entry into the 4th left back entry, that is what I meant.

Q. Now, you can state to the jury whether you were familiar with the 4th left back entry and the 4th left main entry at the time it was being driven.

A. Yes. Had been through it a great many times, in fact every time I visited the mines there I went through them.

Q. State or tell the jury what was the size, the dimensions of the 4th left back entry?

A. I think they were driven 9 feet wide and the thickness of the coal; sometimes they would be wider, and sometimes a little smaller, but generally used to drive them wider on account of the coal, the miner was benefitted by it.

Q. How was the coal hauled out of the 4th left back entry when it was being driven?

A. This is the main slope (referring to the map); this is
116 where the rope runs in on to the parting; the rope is run down to this point, that would be the 4th left back-entry point from where she turns at right angles to the slope; while they were driving it the main slope would lift a load from that point, and this back entry was developed, every so far they put in cross-cuts, and every so far, that is three or four cross-cuts, they put in an angle cross-cut or slant. Now, then the back-entry man when driving, he would deliver his load through the angle cross-cut, or the driver, rather, and he would deliver it on to the parting by a mule, and as she developed they would keep on putting on these angle cross-cuts.

Q. Now during the time that this back entry was being driven and the work performed which you have just described, tell the jury how the air was conducted up to the face of the back entry.

A. Well, she would come through the cross-cut, that would be the distance of the development at that time; when she was turned, she would come down the main slope through the first cross-cut below the 4th left back entry. She would come up the back-entry slope; she would then take the 4th left back entry to the last cross-cut which was holed between it and the back entry and then finish at the rooms that were turned and return to the plane.

Q. How would the air be conducted up to the face of the back entry after it had come to the last cross-cut?

A. There was a brattice generally used which would be on the high side of the entry; the air would come in on the low
117 side; if they had the brattice in 3 feet, 5 feet, 10 feet, she would come to the face and then return back on the brattice to the cross-cut.

Q. Tell me what means were used for hauling the coal out of the 4th left back entry?

A. Well, it was by men driving. There was a "T" iron track

there and mine cars, which came up the main slope and went in there.

Q. What was the size of these cars?

A. Well, they would hold from 2,500 to 3,000 pounds of coal.

Q. What was their dimensions?

A. I could not just describe the dimensions, Mr. Twitchell.

Q. Well, how were the cars hauled out of there?

A By mules.

Q. Mules would be driven clear up into the entry, would they, for the purpose of hauling out these cars?

A. Yes, sir.

Q. And that was the means used during the entire time when the 4th left back entry was being driven, was it?

A. Yes, sir. It takes a good mule to pull up this slant, a large one.

Q. What size mule would be driven through that dimensions?

A. 16 hands.

Q. I believe you have stated, Mr. Fletcher, that all of these stoppings were blown into the back entry at the time you went in there with the coroner's jury. Give to the jury, if you can, approxi-
118 mately the cubical contents of the average one of these stoppings, between the 4th left main entry and the 4th left back entry?

A. Well, it would be, if it is 6 feet high or 7 feet, or 8 feet wide or 9 feet wide, at the time, that would be, we will estimate it 6 x 9 equal 54 multiplied by the pillar would give you the cubical contents for one stopping:

Q. Do you mean to say that these stoppings filled up the entire cross-cut between the main and back entries?

A. They were generally loaded full.

Q. Now, you can tell the jury, if you can, what was the air measurement made by yourself and Mr. Fleming at the last cross-cut on the 4th left back entry at the time you were there with the coroner's jury?

A. It was 4,900 cubic feet a minute.

Q. How many cubic feet of air, Mr. Fletcher, was necessary in that part of the mine to sustain 24 people and to drive out any gases or impurities accumulating in the 4th left entry or any of the rooms turned off of it which were then in operation, that is, prior to the explosion?

A. Angle room No. 8, it would be 1,584 cubic feet per minute, for the 24 men, assuming 66 cubic feet per man per minute.

Mr. FIELD: Object to it and move to strike out the answer because the assumption is utterly unauthorized.

Q. How many cubic feet of air per minute is necessary for one man in the mine?

A. 66.

119 Q. Then how much air is necessary for 24 men?

A. 1,584.

Q. Did you follow along the air current at the time you were

there with the coroner's jury from the last cross-cut between the main and back entries to a point beyond room 8?

A. I led the jury there mostly all the time.

Q. Did you follow the air current from this point to a point beyond room 8?

Mr. FIELD: Objected to as leading.

Q. What did you do after you took this measurement with Mr. Fleming at the last cross cut between the main and back entries off the 4th left; state whether or not you followed the air current in its course through the rooms turned off of the 4th left entry?

A. Yes, we did.

Q. Well, in doing so, did you pass beyond room 8 or not?

A. I went into the cross cut between No. 8 and No. 7.

Q. State whether or not, Mr. Fletcher, at the time you were there with the jury and when you were in the cross-cut between rooms 7 and 8, the air current was such as would dispel or drive out any explosive gases which from your knowledge of that property were accustomed to be generated at any place along that air current?

A. Yes, I was in there with a naked light the following Monday——

120 Mr. FIELD: I ask to strike out the latter part of witness's answer because it is not responsive and it does not follow logically.

Mr. TWITCHELL: I don't object to its being withdrawn.

The COURT: Gentlemen of the jury, that part of the answer as follows: "I was there, in there with a naked light the following Monday," is withdrawn, it is not before you in evidence and you will not consider it at this time.

Q. Mr. Fletcher, tell the jury now, what evidences of explosion, if any, you found at the face of the 4th left main entry.

A. I found coke on the end of a car which had been blown off the track; it was about an inch thick.

Mr. FIELD: At the face of the 4th left main entry?

A. It was at the upper side of the last cross-cut between the 4th left main and the 4th left back entry.

Mr. FIELD: Object to the answer of the witness and ask that it be taken from the jury because it is not responsive.

The COURT: Gentlemen of the jury, the answer of the witness as follows: "Well, I found coke on the end of a car which had been blown off the track; it was about an inch thick," is withdrawn and it is not before you in evidence and you will not so consider it.

Q. What evidence of explosion did you find up at the face of the 4th left main entry?

A. Found the canvas blown down.

121 Q. What else did you find in that immediate vicinity, if anything?

A. At room 14 or it would be at room 15, I think, there was a powder keg on this side of the first cross-cut going up the room

which was spread open; there was also one about the mouth of the room; there was two, I think, between that and 16 room, and there was either two or three on the car, inside of the car.

Q. What car was this?

A. That was a car of coal which sat on the track.

Q. On what track? In the entry or in the room?

A. In the entry.

Q. Was the car on the track when you discovered it, or off the track?

A. It was off the track.

Q. What evidences of explosion, of flame or fire did you find about this car?

A. I found coke on the back end of the car about an inch thick.

Q. In which direction would the back end of that car be with reference to the current of air passing through the air course, be against it or with it?

A. No. 17 room where the cross-cut came through 16 and 17, the face of 17 room was almost opposite the cross-cut, the current passed by the car through the cross-cut.

Q. And not against it?

A. No, sir.

122 Q. Well, what other evidences of explosion and fire and flame did you find in that vicinity besides this coke which you found on this car?

A. Props were charred.

Q. How in your opinion, Mr. Fletcher, was that coke formed upon that car?

A. Well, from the dust which would be carried with the flame, the particles would be coked traveling with the flame and whatever it came in contact with it would adhere to, it would lodge on.

Q. Did you examine the props in 17 room and in 16 room?

A. I don't think there was any props in 17 but I examined all the props from 16 out to No. 8.

Q. Now, tell the jury just exactly in what condition were those props with reference to flame and evidences of explosion and fire.

A. As we passed room 16 through the last cross-cut the flame, the props were charred on the side traveling outwards and as you would go up into where the face of the room was it would be charred up to the face of the room. If there was two cross-cuts she would go up to the two cross-cuts very often; she would go through into the next room and char the prop and return down to the cross cut or up, if the cross-cut were above, the inside cross-cut; she would go up or down whichever it might be. Right back at No. 9 or No. 10 were the same way. No. 8 had two cross-cuts. I was up through that to the face of the room. Their props above the cross-cut were not charred at all.

Q. In what room was this, Mr. Fletcher?

A. In room No. 8.

123 Q. The props above the cross-cut were not charred?

A. No, sir, the props were not charred above the cross-cut; I drew Mr. Leaden's attention to this matter.

Q. Did you draw anybody else's attention to it?

A. All the jurors that were there. But I spoke to him in regard to the matter because he was next to me, that was the reason. I went through around or back of the canvas of No. 8 room; came down on the back side of the brattice, went through the cross-cut to 7 and returned; then went down No. 8 room on to the 4th left left main entry.

Q. What other evidences of explosion, if any, did you find in room 15, 16 and 14?

A. We found boxes scattered and there was a cartridge standing in some room but I forget the number of the room.

Q. Was that cartridge standing up against the face of the coal?

A. Yes, sir.

Q. Now, Mr. Fletcher, if you have had occasion to examine into the causes of explosion — this one, please state so.

A. Yes, sir.

Q. Where and when and what was their character?

A. Yes, I have; I went through No. 2 mine at Frontenac, examined those air course after they had exploded.

124 Q. Was that prior to the explosion in the White Ash mine?

A. Yes, sir.

Q. What kind of an explosion was that in No. 2 Frontenac?

A. It was a powder explosion.

Q. When was that explosion at Frontenac?

A. It was in October, if I am not mistaken, '88, and I went to work for the company in '89.

Q. What other explosions have you had occasion to investigate?

Mr. FIELD: Objected to as cross-examination of his own witness.

Q. Mr. Fletcher, have you or did you form an opinion as to the cause of the explosion in the White Ash mine on the 27th day of February, 1895?

A. Yes, sir.

Q. Have you formed an opinion as to where that explosion originated?

A. Yes, sir.

Q. Tell the jury what is your opinion of that explosion and what was its cause.

A. My opinion was that it was through powder that had ignited at or near room 16.

Q. From what you saw there was there also an ignition of gas?

Objected to as leading.

Q. I will ask you, Mr. Fletcher, from the indications of fire and flame in rooms 8, 9, 10, 11 and 12, whether or not there was indications also of a gas explosion?

A. No, not when I was present.

125 Q. Now, I would like to have you explain to the jury, Mr. Fletcher, just exactly the system of air ventilation in the

White Ash mine, starting with the main intake and going right through the mine, prior to the explosion.

A. The fan is located at this point; this is the main slope or intake; the air travels down the main slope to the bottom of that plane; she splits half or nearly half, whichever way you want to regulate it, going to the right and half to the left. We have a parallel slope which is driven right with the main slope on each side of the main slope. The air would return through this cross-cut or through the last cross-cut between the main slope, it may be that left parallel slope, the air would return up through the back slope to the back entry of the 6th; as this plan shows she would go the last cross-cut on the 6th, returning on the 6th main, she would take in room that is driven off the 6th main.

Mr. CLANCY: There are no rooms shown driven off there.

A. She would come down the main 6th, through the cross-cut to the upper air course which parallels the 6th, on to the main slope, on to the main parallel slope, the left parallel slope; she would go up to the 5th, take the 5th back entry; she would return on the 5th main; she would take No. 1 room; she would turn down No. 1 room and through No. 3 room of the plane down through the cross-cut to No. 2, through the inside cross-cut of No. 1, to the back slope of the main slope; she would go up to the 4th left back entry, through
126 the 4th back entry to the last cross-cut, she would take No. 17 room, through the cross-cut to 16, through the cross-cut to 15, through the cross-cut to 14 and right back to the plane; she would go through No. 1, No. 2, No. 3; come through the plane cross-cut go up room No. 1, come through into the 3d left back entry she would traverse the 3d left back entry to the left cross-cut, go up to the face by a canvas and back to No. 20 room in through cross-cut into 19, through inside cross-cut to 18, come back to No. 8 room on the 3d left, into the 2d back entry, a portion of the air that would come through the rooms would split there and come back to the plane, and went through No. 1, No. 2 and No. 3 on the plane, up the plane where connection was made between the plane and the 2d back entry. She would take the 2d left back entry to the face, through the last cross-cut and ventilate 10, ventilate 9, she would go up 8, go through the cross-cut into No. *p*, go through the inside cross-cut to No. 6, through the cross-cut between 5 and 6 and back to plane entry; she would ventilate the plane room 1, 2, 3, 4 and 5, and connect with the first left back entry where connection was made with No. 5 room off the plane; she would the 2d left to the face, go through the last cross-cut; she would travel down through No. 1 left and take the overcast, make a joint current with the right parallel slope above the 1st right she would take the right parallel slope up to where the crop entry which was driven above the 1st left which went into the slope and the fan shaft or
127 the fan slope; now that is the left side. There was a little error here that I made in the 5th left. I want to correct it. When the air returned in the 5th left she took the plane into No. 1 room, then through cross-cut to No. 2, then into No. 3, then return

back through cross-cut into No. 1 room and came into the 4th left back entry.

Q. Now, Mr. Fletcher, from your knowledge of the system of ventilation of that property, state whether or not it was sufficient for the purpose of the proper ventilation of the White Ash mine prior to the explosion on the 27th day of February, 1895?

A. Yes, sir.

Q. Now, I want you to describe the character of stoppings from the main intake to the foot of the slope.

A. Well, the stoppings from the mouth of the main slope are put in with boards and adobe clay, for 20 or 30 of them was repaired previous to this explosion. Taking the main slope right clear down boards are put on and generally dirt thrown, gobbed on to its sides; the left parallel slope above the overcast acted as a manway; a man can walk into the work above the overcast; above the overcast stoppings were rock stoppings, were all put in if I remember right, 14 against the old work on the Rogers property or Rogers mines, and to the left also, the Green mine, as they were all connected together from one to the other; these stoppings are from three to four feet of rock; they had two coats of cement; there was fire on this side of the mine when we took possession of the property and I was on the ground myself when these stoppings were put in, with Mr. Brown, Mr. Rogers and other men on the ground helping to put them in.

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Q. Now describe the other stoppings clear down to the slope, the general character of the stoppings.

A. The stoppings on the main slope were cut in the sides and props were set boarded, plank was nailed on to the posts; then she was gobbed on both sides or filled full with dirt or refuse from the mine.

Q. Now, what was the character of the stoppings in all of the cross-cuts where stoppings were used the left side of the mine, were they some of them described by you as having been between the main back entries and the fourth left?

A. Yes.

Q. I will ask you whether or not these entries were such as were sufficient to perform their duties necessary to be performed in the conduct of the air through the mine.

A. Yes, sir.

Q. I will ask you now, Mr. Fletcher, whether or not air passing along the fourth left back entry before it would reach the face of the third left back entry, would have to pass all of the rooms from room 6 to the face of the fourth left entry.

A. Yes, sir.

Q. Then the air coming into the mine and *and* passing on to the left side of the mine for use by individuals working up in the rooms turned off the 3d left would first have performed its duty to the people working on the 4th left, would it not?

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A. Yes, sir.

Q. And the same as to people working in the 2d left, is that not so?

A. Yes, sir.

Q. That is, the air current in passing through the left side of the mine, in order to reach people working rooms on the 3d left, would have had to pass over these depressions in the 4th left air course up to the face, and through the rooms turned off of the 4th left up to room 6; is it not so?

A. Yes.

Court adjourned till 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. Mr. Fletcher, tell the jury how the fan, for what purpose that fan was used with reference to the ventilation of the White Ash mine, on or about the 27th day of February, 1895. What effect did it have?

A. Why, it exhausted the ventilation, it exhausted it from the mine and caused a vacuum in revolving, and the air was rushed in to occupy the space, or to replace that pressure rather on the outcast, or return air course rather it would be.

Q. What was the velocity of that fan, if you know?

A. We used to run it about 65 or 70 revolutions per minute.

Mr. FIELD: Object to the answer of the witness because it is not responsive to the question.

Q. And what effect did these revolutions of this fan have upon the air or gases in the mine?

A. It would draw them out.

130 Q. But how would the fresh air get into the mine?

A. It would go down the main slope and return up the return air course to the fan.

Q. Now, Mr. Fletcher, describe the dip of the coal measure in the White Ash mine, and the system of working it at that time.

A. Well, the dip is from 12 to 14 degrees; the main slope is driven on the full dip of the coal and cross-entries are turned at right angles to the dip. The rooms are turned off the cross-entry at about 45 degrees up the pitch; it is called "room pillar" system.

Q. Describe the room and cross-cuts and the pillars and entries other than the main slope.

A. Entries are driven 9 feet wide by the thickness of the coal; our cross-entries were driven the same; rooms were turned narrow, that is, 8 feet wide by the thickness of the coal for 24 feet, which we called the neck of the room, then it is widened out to 20 feet and between each room there is a pillar of coal left which is twenty feet thick, and every so far cross-cuts are driven between the *the* rooms from one room to the other, that is, 8 feet wide and the thickness of the coal.

Q. What was the average length of these rooms turned off the entry?

A. If I remember right, they were run about 30 feet, some a little more.

Q. Can you state in cubical feet a minute, what was the exhaust of that fan?

Mr. FIELD: Objected to because there is not a man on earth can state in cubical feet per minute the exhaust of that fan without any further information; there is no proper foundation for the answer.

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Q. You are acquainted with the fan and its power?
A. Yes, sir.
Q. Do you know what its exhaust was in cubic feet per minute?
A. I have seen it produce——
The COURT: Answer yes or no.
A. Yes, sir.
Q. State how much it was.

Mr. FIELD: Objected to because it is improper and no foundation is laid for the question, and the exhaust power of that fan does not appear in the question or in any part of the examination of the witness.

Objection overruled. Plaintiff excepts.

A. 48,000 to 50,000 cubic feet per minute.
Q. Now, how was coal mined in that mine at that time?
A. It was blasted out of the solid by drilling holes in and charging with powder, without there was roof pillars to be drawn, then coal would be sometimes undermined so as to save the amount of powder to the shot.
Q. Explain to the jury what you mean by "blasted out of the solid." Explain just exactly how a miner would mine the coal.

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A. Well, a hole is drilled right into the face of the coal and charged with powder; then it is fired by a patent squib, an explosion takes place and pulls down the coal; blows out the coal.

Q. Do you know, Mr. Fletcher, whether or not there were regular hours of firing in the White Ash mine at and before the occurrence of this explosion?
A. Yes, sir.
Q. What were they?
A. Entrymen were allowed to fire at 9 o'clock.
Q. What do you mean by entrymen?
A. That is the men driving the cross-entries or main slope. They were also allowed to fire at 12 o'clock, when also the room were allowed to fire at 12 o'clock. Entrymen were allowed to fire at from 2.30 to 3 o'clock, and also at quitting time. By this way it gave the entrymen four chances to fire during the day and the room twice; the room men had 20 feet to make their day's work there, while the entrymen only had 9 feet.
Q. How long prior to 12 o'clock, which was the regular hour for firing in the rooms, Mr. Fletcher, would miners begin to make their cartridges for the purpose of blasting coal from the solid, if you know of your own knowledge?

A. Well, from half past ten to 11, sometimes 11.30, so they had to time their holes right, so as to fire at noon.

Q. Then if this explosion occurred at 10.45, state whether or not—state what at that particular time the miners in the rooms would ordinarily be engaged in.

Mr. FIELD: Objected to as calling for the opinion of the
133 witness and not for any facts. It is asking the witness to speculate as to what these men might have been doing at the time of the accident.

Objection overruled. Plaintiff excepts.

A. Well, they would be loading their coal and after loading their coal, between times they would be preparing for firing shots, that is, drilling holes, making cartridges, damping their holes ready to fire at noon.

Q. Now, supposing the miners working in the mine on the 4th left entry or any one of them had *was* is called a bad shot, state whether or not permission was given to them to fire between regular hours in cases of that kind, and, if so, by whom.

A. It would be by permission of the mine foreman.

Q. Mr. Fletcher, do you know what is known as a windy shot?

A. Yes, sir.

Q. What is it?

A. It is where a hole is drilled too far on the solid and where the judgment of the man that charges the hole gives a too small charge to perform her work and not having powder enough to blow out the coal it blows out the damping.

Q. Describe the effect of such a shot.

A. It would be flame that would be produced from the gunning shot.

Q. How much flame?

A. That would depend entirely upon the amount of powder that was in the charge.

134 Q. Do you know how far flame would extend caused by a gunning shot?

A. Yes, I saw the effects of it in the 3d right in the White Ash mine previous to the explosion.

Q. State how far?

Mr. FIELD: Objected to as wholly immaterial what happened in the 3d right of the White Ash mine before the explosion. Being no evidence of a gunning shot in the 4th left.

Objection overruled. Plaintiff excepts.

A. Well, seventy feet as I know of.

Q. Do you know how much powder was accustomed to be used by the miners at work in the rooms and entries in the White Ash mine on the day shift?

A. No, sir, I could not answer that.

Q. Were you acquainted with the amount of powder required by two miners working in a room in order to produce the tunnage ordinarily produced on one shift in a room in that mine?

A. Well, they would use from 10 to 12 feet of powder from a 2-inch cartridge stick; there are 25 feet to a keg which holds 25 pounds.

Q. And how much powder then, according to your knowledge of the necessities required in the mining of coal in the 4th left entry would two miners be apt to have in any one room?

A. They would have 25 pounds; they used to take it down in 25-pound lots.

Q. Now at the time you made your investigation of the 4th left entry and the rooms turned off of the same subsequent to the
135 explosion, state what if any, indications you found of a powder explosion?

Mr. FIELD; Objected to; he has been all over that yesterday.

Mr. TWITCHELL: I want to bring out the special number of kegs; it has not been brought out yet.

Objection overruled. Plaintiff excepts.

A. Powder cans were rent open; there was a blue cast over the cans which indicated that powder had been exploded. There was one at or near the mouth of room 12, one up near the cross-cut in 15, there was two between 16 and a car, if I remember right; 3 between 16 room and the car and two on the inside.

Q. Inside of what?

A. Between the car and between 17 and 18 near the cross-cut.

Q. What in your opinion, Mr. Fletcher, would be the effect from an explosion of powder upon particles of carbon in the various rooms of that mine?

A. As quick as the powder would explode flame would be there, dust would rise, and she would ignite all small particles that would be in the air.

Q. What effect if any, would such a condition have upon any small quantities of gas either passing in any portion of the mine or in any portion of the 4th left entry which under ordinary conditions would in no way be dangerous in the operation of the mine?

136 Mr. FIELD: Objected to because it involved an assumption that there were some small quantities of gas in that mine which in no way would be dangerous except in case of a powder explosion; this is a hypothetical question not based upon any fact proven in the case; it involves assumption not drawn from facts proven.

Objection overruled. Plaintiff excepts.

A. It would ignite it if it came in contact with it.

Q. As to being wet or dry, what would you call the White Ash mine; was it a wet mine or a dry mine, or a medium mine?

A. I would not consider it a wet mine.

Q. Can you state, Mr. Fletcher, from your experience as a miner, where an explosion occurs and individuals are killed by concussion, whether or not the force of that concussion is felt in all directions or at all points at an equal distance from the initial point of the

explosion, provided the conditions in each direction, each and every direction are equal.

Mr. FIELD: Objected to because it does not appear that this man was ever killed by concussion or that he was ever present when anybody else was killed by concussion.

Objection overruled. Plaintiff excepts.

A. I should think so.

The COURT: Is there anything to show that these men were killed by concussion?

137 Mr. FIELD: Yes, we had evidence that they were killed by concussion.

Q. Now, Mr. Fletcher, supposing that room 8 was making gas and that the gas was in the air current passing through room 8 and there was an ignition of gas in room 8 at a point above the last cross-cut and near the end of the curtain, state whether or not, in your opinion, all of the gas in that particular place would be ignited and what effect it would have upon the props in the room, the curtains and the walls on each side of the room, the face and the two side walls as to giving indications of fire and flame.

A. It would surely fire all the gas in the room in the first place; in the second place the canvas would be blown down and scorched; props would be utterly charred.

Q. State whether or not the props nearest the face of the rooms would be burned in their entire circumference.

A. They would if the flames circled around.

Q. When you went into room 8 subsequent to the explosion, how far, if you know, from the face had the rails and ties in that room been taken up?

A. I went up to a tie that was set across there with the fire boss's mark on; I should judge about from 50 to 60 feet above the cross-cut. The props were charred opposite the cross-cut but up near the face the props weren't charred at all.

Q. Well, when you went in there how far was it from the last cross-cut coming from room No. 9 into room 8 that the track

138 was taken up; was the track taken up above that tie which you found on the track?

A. I think it was up to the tie.

Q. I wish you would take that lamp there Mr. Fletcher (referring to safety lamp in evidence) and show the jury just exactly how you would inspect for gas in a room.

A. Well, you would unlock your lamp and light it; it unscrews in this shape; you would light a wick; when you go into a room and was testing for the gas you would pull your flame down to about that size (illustrating with the lamp); then you would commence to go up towards the roof and any place where there was gas there would come a blue hood or blue-colored flame over the top of the lamp.

Q. You mean over the top of the other flame, don't you?

A. Yes, sir. And if she filled she would explode in the lamp.

Q. Explode where in the lamp?

A. Inside the gauze. Now the philosophy of it not coming out is that there is 784 of these little meshes to the square inch, and the heat that is in there, coming in contact with the gauze expands it when it reaches the temperature of the flame so that it will not come in contact with any explosive mixture on the outside of the gauze.

Q. Now, on the day that you and the coroner's jury went up into room 8, did you have that kind of a lamp with you?

A. Yes.

139 Q. State just what parts of room 8 you went into with this lamp, with reference to the face and the air current passing through room 8?

A. Went right up to the face of No. 8 room, across to the face, returned down to where the cross-cut led into No. 7 room; came across the room to the back side of No. 8 and went down No. 8 room.

Q. Did you find any gas?

A. Not a particle.

Q. If there had been any gas there would you have found it with that lamp?

A. I am positive we would.

Q. What was the conduct, Mr. Fletcher, in room 8, particularly of those of the coroner's jury who were there with you, as to making an inspection of that place, particularly of Mr. O. W. Alexander?

A. He made no inspection whatever.

Q. Did you see Mr. Alexander go under the curtain which runs from the last cross-cut in room 8 up towards the face?

A. No, sir.

Q. Well, did he go under there?

A. I could not swear that he did not; I don't think we would have let him break the curtain down in any shape or form.

Q. Well, if he had gone under the curtain he would have had to break it down, would he not?

A. He would have broken the current between the curtain and the face.

Q. The current of air?

140 A. Yes, and it didn't look reasonable that we would have allowed anything like that so long as we had the jury with us.

Q. What percentage of gas, Mr. Fletcher, can be detected with that kind of a safety lamp?

A. 3 per cent.

Q. Does it require a man familiar with the operation of a lamp of that kind to detect gas or not?

A. Yes, sir.

Q. As mine inspector at the time of this explosion and for a year prior thereto, what were your duties?

A. To inspect the mines of the Santa Fé company.

Q. How many mines did you inspect?

A. Well, we had mines in Illinois, Missouri, Kansas and northern Colorado and New Mexico.

Q. Did you ever inspect the White Ash mine?

A. Scores of times.

Q. Tell the jury how you would inspect it, and when you would make an inspection.

A. Well, I generally go down the main slope, generally with the superintendant and mine foreman; I would notice the timbers as I would be going down and see if they were broke or any broken timbers; notice the roof if there was any dangerous part to it; noticed the track; we generally took a reading of the amount of air that was traveling through the mines, we would go through the cross-entries and examine them closely as to whether there was any gases, and inspect the rooms as to their distance and conditions.

141 Q. How long had it been, Mr. Fletcher, prior to the explosion since you, as general mine inspector, had made an inspection of the White Ash mine?

A. I think it must have been almost three months. It took me about six weeks to make a trip all around all the properties.

Q. Tell the jury why it was that you had not made an inspection of the White Ash mine during that period.

A. Well, I had been in an explosion myself; I went to stop a fire at the mines on fire at Vulcan, Colorado, the mine was flooded with water; well I was burned there myself.

Q. Did you know the pit boss, the day pit boss, of the White Ash mine, at the time of the explosion?

A. Yes, sir.

Q. How long had you known him?

A. I had known him somewhere about four or five years.

Q. Where had you known him and with what was he connected during that time?

A. I think the first time I met Mr. Donohue was at Blossburg town, New Mexico, working.

Q. Where else?

A. I met him also at Starkville, and Rockville, or Brookside, Colorado. Then I met him at Waldo; he worked in Waldo and then at the White Ash mine.

Q. Will you please state to the jury what were Mr. Donohue's qualifications as a pit boss?

A. I would say he was a competent man.

142 Q. Did you know Mr. James Duggan?

A. Yes, sir.

Q. What position did he occupy at the White Ash mine at the time of the explosion and for five or six months prior thereto?

A. Mr. Duggan was superintendent of the mines there.

Q. How long have you known Mr. Duggan?

A. Why, I had known him about two years at that time.

Q. You had known him about two years then?

A. Yes, about two years I should judge.

Q. From your acquaintance with him and from your experience

as a mine inspector and as a miner, what have you to say with reference to the competency of Mr. Duggan for the filling of the position that he held at that time?

A. I would say that he was competent to fill the position, superintendent of mines.

Q. I will now ask you, Mr. Fletcher, from your experience as a miner and as a mine inspector and superintendent of mines, and from your knowledge of the safe and reasonable working of gas-y coal mines, to state whether or not any miner, no matter what his nationality or his ability to speak or write the English language, would cross over a fire boss's danger-signal mark?

A. He never would without he was blind.

Q. Now at the time that you made an examination of the rooms turned off of the 4th left entry subsequent to the explosion, state whether or not you made an examination of the roofs of these rooms?

143 A. Yes, sir.

Q. What, if any, evidences of heat and flame or explosion of powder or other explosions did you find on the roofs of these rooms?

A. In the back entry of the 3d left, of the 4th left, showed where the explosion had trended that way as the sides and roof had the blue cast showing that there had been flame through there.

Q. I will ask you to state whether or not there was any coal which had been shot down in room 17.

Question objected to as leading. Objection overruled. Plaintiff excepts.

Answer that question.

A. There was a little coal there where that shot had been fired, showed that the back of the shot was left in and very little coal was lying in the room.

Q. Now in making your examination of the various rooms subsequent to the explosion, what, if any indications did you find, as to any fire boss having been in any or all of those rooms?

A. Yes, the fire boss leaves a mark after he inspects the room for gas; he marks the day of the month and the initials of his name.

Q. Now, Mr. Fletcher, a few moments ago you stated that you found a tie in room 8 about 60 feet upon the track above the last cross-cut. I will ask you whether or not you are certain that it was 60 feet above the last cross cut, and if you are not certain state

144 where you now remember it to have been or if you have any desire to correct your testimony, give it.

Mr. FIELD: Objected to as cross-examination of his own witness, leading and suggestive and an intimation to the witness that he made a mistake that the gentleman would like to have him correct.

The COURT: If Mr. Fletcher—I will let him answer the question. Objection overruled. Plaintiff excepts.

A. The room was up about 60 or 70 feet above the cross-cut; No.

8 room was 60 to 70 feet above the last cross-cut. The tie was up above the cross-cut. Of course this has been 2½ years since that happened and it is a hard thing to do to remember just exactly where that tie was; I know that it was up above the cross-cut.

Q. How was that tie marked?

A. By X X, chalk mark which indicated danger. Every man in the mine and boy knew what it meant.

Mr. FIELD: I object to the latter part of the witness' answer.

The COURT: Gentlemen of the jury, the last part of the witness's answer as follows: "Every man in the mine and boy knew what it meant," is withdrawn, is not before you, and you will not consider it as in evidence.

Q. What color of chalk had been used, Mr. Fletcher, if you remember, in making these crosses which you found on this tie?

A. White.

Q. What significance did that chalk mark have to people working in the White Ash mine?

145 A. It meant danger.

Q. Well, what effect would that have upon a miner reading that upon a tie or in any other place in the White Ash mine, what would he do?

A. He wouldn't go over the mark.

Q. Now, I will ask you, Mr. Fletcher, whether or not in any part of the 4th left entry outside of room 8 you found any fire boss's danger signals at the time you made the investigation subsequent to the explosion.

A. Outside of room 8?

Q. Yes.

A. No, sir.

Q. After there has been an explosion, a powder explosion for instance, what is the effect upon the air in the immediate locality of the explosion?

A. Well, it uses up all the oxygen in the air.

Q. And what is the resultant composition after a powder explosion?

A. Of a powder explosion alone, why without we would get dust or gas combined in the air, why, we would have after damp from the result of the explosion.

Q. Suppose there was a combination of explosions from gas, dust and powder, what would be the resultant composition or condition?

A. All the oxygen would be used out of the air and we would get nothing but after damp or black damp.

Q. How many kinds of damp are there?

146 A. Well, there are black damp which miners generally call it, which is carbonic acid gas, and there is white damp; these are the only damps that we have.

Q. What is after damp?

A. After damp is a composition of gases after an explosion; it is composed of a portion of black damp and a little percentage of white damp in it and free nitrogen.

Q. Is there any oxygen in it?

A. No, sir.

Q. Then what effect does it have upon a person if he happens or walks into a place where this after damp is accumulated?

A. Well, if he stays in there any length of time it results in death.

Q. Can a man breathe with after damp?

A. For a very short time.

Q. And that is for the reason that there is no oxygen in it, is that not so?

A. Yes, sir.

Q. What effect does this after damp or black damp have upon any ordinary light?

Mr. FIELD: I object to the gentleman using the expressions, "after damp" and "black damp" as if they were interchangeable.

Question withdrawn.

Q. What effect does after damp have upon an open ordinary lamp?

A. Well, light will burn it.

Q. Is after damp, or that condition which exists subsequent to an explosion of powder, gas or carbon of any color? Can you see it?

A. No, sir.

147 Q. You have stated, Mr. Fletcher, that the entries in that mine were driven at a height equal to the height of the coal, and at nine feet wide; I will ask you to state whether or not it was necessary to have an entry of that size in order to take the air up to the face and through the rooms on the fourth left.

A. Well, it didn't require that much area.

Q. Now I will ask you whether or not the miners working in the rooms and at the face of the fourth left entry, would have been able to work there on the morning of the explosion if there had been an insufficient quantity of air passing through these rooms and who are the people who would have first noticed the insufficiency of the air.

A. The miners are the ones that would have noticed it.

Q. What would have been done by a miner if he had noticed an insufficiency of air?

A. He would surely have come out or made complaint to the foreman.

Q. If the current had been obstructed or was stopped what would have been the resultant condition so far as the air is concerned at the place where the miners were working?

A. They would have had none.

Q. What would originate there if the current was stopped?

A. Well, black damp would accumulate which naturally takes the breath away from men and mules.

148 Q. Now I will ask you if there was such a condition of obstruction in the fourth left air course whether men working in the rooms off of the third left main entrance would have noticed

the conditions sooner or later than people working on the fourth left?

A. It would have been sooner.

Q. Where?

A. Up in the third left, as the current of air would take the fourth and return to the third so that the men in the third would be short before the men in the fourth would be.

Q. From your experience as a miner and your connection with mines which generate gases, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine?

Mr. FIELD: Objected to because this witness has testified that he saw no evidence of gas in the fourth left at the time of this explosion and this is a request to the witness to speculate about what might have been, what might have happened.

Objection overruled. Plaintiff excepts.

A. Men drilling holes may tap gas or a certain break in the roof where gas is given off from the adjoining strata, gas is liable to appear.

Q. What do you call that sudden appearance of gas or condition of affairs that produces gas in that way?

A. Well, a man drilling a hole is liable to come to a cavity or small place in the coal or opened slips which generate gas, sometimes
" strong blowers," the miners' term, and when gas is given
149 up from the adjoining strata, especially where there is a coal seam adjoining close, she comes down through any break that would be in the roof.

Q. I will ask you to state now, Mr. Fletcher, whether or not the likelihood of such a condition of affairs in a gas-y mine is known to the individuals working in a coal mine of that character?

A. Yes, sir.

Q. I will ask you Mr. Fletcher, if men were taking rails out of an abandoned or finished room, at which end of the track would they begin to work with reference to the face?

A. They would naturally commence on the inside first.

Q. I will ask you to state whether or not if two miners working in the White Ash coal mine go into room No. 8 for any purpose whatever would walk over the danger signal placed upon the railroad track or pass danger signals marked upon the coal, they did or did not violate the orders in that mine?

A. Yes, sir.

Q. They did what?

A. Violated the orders.

Q. Do you know Mr. Kilpatrick?

A. Yes, sir.

Q. What position did he occupy at the time of the explosion, if you know?

A. Night mine foreman.

Q. How long had you known Mr. Kilpatrick?

A. I had known him about 7½ years.

150 Q. What have you to say with reference to his competency for the position which he held at that time, if you know?

A. I would call him competent.

Q. Can you state, Mr. Fletcher, anything with reference to the production of coal in the White Ash mine during the month of February as compared with the production of coal during the month of January of that year from your own knowledge?

A. Not positively. I was there in January but I forget the production; I generally use to get the monthly production.

Mr. TWITCHELL: That is all. I will ask the privilege of recalling this witness if I find I have forgotten anything.

Cross-examination.

By Mr. FIELD:

Q. You were at Cerrillos in January?

A. Yes, sir.

Q. What time in January?

A. I could not tell just exactly the day of the month was, but I was there in January, but didn't go into the mine.

Q. Mr. Fletcher, you were in the city of Topeka, Kansas, at the time of this explosion, I believe.

A. Yes, sir.

Q. What do you understand by the term personal knowledge? Do you think a man who is in the city of Topeka, Kansas, when an explosion occurs in Cerrillos, New Mexico, can come be-

151 fore a jury and tell them of his personal knowledge what happened in that mine at or before the explosion?

A. Yes, sir.

Mr. TWITCHELL: Objected to unless the question is specified with reference to some particular personal knowledge testified to by this witness.

Q. Have you discovered any method, Mr. Fletcher, by which air can be conducted in opposite directions at the same time through the same channel?

A. No, sir.

Q. Is there any peculiarity about the air in the White Ash mine?

A. Yes, sir, after it has gone through the workings.

Q. The ordinary rules of physics, which apply to air generally, in your judgment do not apply to the air in the White Ash mine?

A. Well, after it has gone through the mine——

Q. Answer my question yes or no. Do or do not the ordinary rules of physics governing air generally, in your opinion govern the air in the White Ash mine?

A. I should think they would.

Q. Do you know whether they would or not?

A. I don't understand just your term.

Q. You are an expert on the ventilation of mines, aren't you?

A. I understand how to ventilate a mine.

Q. You know all about gases, too, don't you?

A. I know them when I see them.

Q. And when you are asked a question with reference to
152 the ordinary rules of physics as affecting air, you don't know what the question means. Will you answer the question?

A. I say yes.

Q. What are the ordinary rules of physics governing the movement of air though mines?

A. Well, it is as I would say, by the power that would be applied in reducing the density of the air, or added to it to pass the air through the mine.

Q. And that is what you understand by the operation of the ordinary rules of physics?

A. I may not understand your technical terms, Mr. Field, but I have had experience enough in a mine to understand the workings of a mine, and how it should be ventilated.

Q. Prior to the explosion of the White Ash mine, several hundred men had been killed in a mine operated under your direction, hadn't they?

A. No, sir.

Q. How many men had been killed in mines operated under your direction prior — the explosion in the White Ash mine?

A. None had been killed under my direction.

Q. No man was ever killed in a mine of which you were the inspector prior to the killing of the men in the White Ash mine?

A. I don't understand it that way.

Q. It is not very much that you do understand, is there, Mr. Fletcher?

A. Well, I understand about the ventilation of a mine, as I told you before, and about the working of a mine as a miner.

153 Q. Do you know whether flame will burn without air?

A. If there wasn't air there you wouldn't have any flame.

Q. Now then, when you made an inspection of the 4th left entry of the White Ash mine, wherever you found flame you know that there had been air going at the time of the explosion, don't you?

A. There had been air going there and the explosion or force of the explosion had met the air and traveled with it.

Q. Now, will you just confine yourself to an answer to my question, and tell me whether, from your great experience as a mine inspector, when you saw indications of flame on that 4th left entry, you knew then positively that at the time of the explosion, air had been going to that place where you saw the evidences of flame?

A. Why certainly, she had been going there.

Q. And the fact that there was no indication of flame at any place in the 4th left entry at the time of the explosion would be absolutely conclusive evidence that at the time of the explosion there was no air at that place, would it not?

A. There could not be any indication of flame there before the explosion in the first place.

Q. I am talking about after the explosion.

(Question repeated.)

A. If there was no air there there would be no explosion.

Q. You understand that to be an answer to the question, do you?

(Question repeated.)

154 A. Well, I claim if there was no air there there would be no explosion.

Q. And if there wasn't any air in any particular place there would not be any flame in that particular place, would there?

A. No, sir.

Q. That flame would not depart from the air current, would it?

A. If there was force enough in the flame or in the explosion she would go against the current; she would expand so rapidly that she would grasp the current and take out the oxygen in the air to feed the flame or the explosion.

Q. The flame could not go in that fourth left entry to any place where there was not air, could it?

A. It could.

Q. Then you can have flame without air?

A. Why, you have got to get air to have flame, and if there is an explosion, if there is material enough there to explode, she would expand and go through the mine, she would go through the space.

Q. Let us go back now to the original proposition, could flame go to any place in that 4th left entry where there was not air at the time of the explosion?

A. I don't think it would, as there would be nothing to feed the flame.

Q. You found evidence of flame in room 8, didn't you?

A. Yes, sir.

Q. Up how far? in room 8 towards the face?

155 A. It was up above the 2d cross-cut.

Q. How far up?

A. Well, I could not recollect the exact distance, but it was not very far.

Q. How far was it with reference to the tie; was it above that tie with the danger mark on that you have testified about, was the flame above the tie or below the tie?

A. At that time when we inspected the place with the jurors, canvas had been replaced and the ties were removed as there was no gas in the room.

Q. Mr. Renehan (the stenographer), read this witness that last question again. How far was it with reference to the tie? Was it above that tie with the danger mark on that you have testified about, was the flame above the tie or below the tie?

A. I would estimate it below it.

Q. Are you sure now that there was no evidence of flame at the time of your examination with the coroner's jury above the point where you saw the tie marked with the danger mark?

A. Yes, sir.

Q. Are you certain of that?

A. Yes, sir.
Q. You cannot be mistaken about it?
A. No, sir.
Q. You testified upon the former trial in this case, didn't you?
A. Yes, sir.

156 Q. Didn't you testify upon that former trial that the brattice was carried up to within 15 feet of the face of room 8 and that the props within 15 feet of the face of room 8 were burned?

A. No, sir; not as I recollect it.
Q. Well, if you did so testify, was it true, or false, Mr. Fletcher?
A. I don't think I testified that way, Mr. Field.
Q. You are perfectly positive now that the props which was nearest to the face of room 8 was not burned or charred?
A. Yes, sir.
Q. And you can't be mistaken about that?
A. The props were not charred within quite a distance of the face of room 8.
Q. You saw evidence of flame in the 4th left air course?
A. Yes, sir.
Q. On the roof?
A. On the sides and on the roof.
Q. How far was it towards the slope?
A. I would judge about 100 feet from the inside cross-cut.
Q. You mean 100 feet from the last cross-cut.
A. Yes, it was toward the back entry.
Q. You mean towards the slope?
A. Yes, sir.
Q. The stoppings of the last cross-cut but one was blown out, wasn't it?
A. I think they were all blown out along the 4th left back entry.
Q. They were all blown into the air course, weren't they?
A. Yes, sir.

157 Q. And prior to the explosion the entire space between the main entry and the air course in every one of these cross-cuts was filled in solid?

A. As a general rule they were filled.
Q. Now, will you explain to this jury, Mr. Fletcher, how you could blow the contents of a hole 30 feet by 6 feet by 9 feet into a hole 9 ft. by 6 by 9?
A. Yes, if she had power enough she would blow it through if it was 50 feet.
Q. Now, you just explain how it was done; the air course was 9 x 6 x 9 and the cross-cut was 9 feet x 6 x 30.
A. Well, it would take down the cross-cut or down the back entry; she would force through and the force of the explosion would carry it with it, and it might go 100 or 200 feet if the force was great enough.
Q. Well, if it only went its full length it would fill the air course solid for a distance of 30 feet, would it not?
A. Why, it would fill up the space along the entry.

Q. What was the height of the coal in the 4th left entry?

A. Well, she would run from 5 ft. 10 to 6 feet, sometimes over six feet.

Q. Where was it over 6 feet, Mr. Fletcher?

A. Well, I could not tell just the exact spot; I use to make a memorandum of the thickness of the coal on my inspections going around. We did have coal close to 7 feet thick on the right.

158 Q. These cross-cuts were all stripped out clean, were they?

A. Well, there was some as I went through were clean.

Q. When you went with the coroner's jury into that mine where was the first place that you went?

A. We went down the slope. If I recollect right we went into the 5th left and up through No. 1 room in the 5th left into the back entry of the 4th left. We went along the back entry for a short distance and there was some water there.

Q. How much water, Mr. Fletcher?

A. Well, Mr. Alexander walked into it. It came up pretty close to the top of his boots. I should say 14 or 16 inches.

Q. Was there, in your opinion, as an expert mine inspector, a sufficient quantity of water in that air course to materially obstruct the current of air?

Mr. TWITCHELL: Objected to without specifying as to time.

A. No, there was not.

Q. In your opinion as an expert mine inspector that passage was just as efficient for the conducting of air as if there had been no water in it at all?

A. It was large enough for the air that was required in there.

Q. Now, do you understand that I have asked you nothing about how much air was required in there? Don't you understand that I was asking you about the carrying capacity?

159 A. I said yes, it was large enough to carry the amount of air that was in there.

Q. Would it carry as much air with the water in it as if the water had not been there?

A. Certainly not.

Q. Then when you said it was just as efficient with the water in it as it was with the water out of it, you did not tell the truth, did you?

A. Well, it would carry the air that was required.

Q. Mr. Fletcher, is a body of gas extending across the face of a room and down 10 or 11 feet from the face into the room in your opinion a dangerous body of gas?

A. Not if it is not ignited.

Q. If you as a mine inspector of the White Ash mine, had information prior to this explosion that there was in room 8 of the 4th left entry of that mine a body of gas extending across the face of the room and down 10 or 11 feet from the face, what, if anything, would you have done about it?

Mr. TWITCHELL: Objected to if the court please, as a hypothetical question based upon facts not in evidence.

Objection overruled. Defendant excepts.

A. Well, I would have had it taken out of there.

Q. If you, as the mine inspector, had information that prior to this explosion there was a body of water in the fourth left air course extending to within three inches of the top of the low side,
160 and covering a place from 200 to 300 feet long in the air course, what would you have done about it?

Mr. TWITCHELL: Objected to; improper cross-examination; hypothetical question based upon facts not in evidence with reference to the time of the explosion.

Objection overruled. Defendant excepts.

A. I would have had it taken out.

Q. Was it part of your duty to prescribe the rules for the operation of the White Ash mine, and did you prescribe written rules for the conduct of that mine?

A. I used to talk over this matter with the superintendent, and the superintendent would issue rules that was for the benefit of the operation of the mine.

Q. Did you make any rules yourself?

A. Not written.

Q. Did you ever see any written rules which the miners were required to sign there?

A. Yes; I have seen rules there.

Q. Did you make these rules there?

A. Why, I know I suggested some of them.

Q. Did you make these rules?

A. Some of them.

Q. Did you make the rule governing the handling of powder in the mine?

A. No, sir; I did not.

Q. Did you ever see it?

A. I don't think there was any rules, if I am not mistaken at that time as to the amount of powder that should be taken down.

161 Q. If there was any such rule you know nothing about it?

A. Not, as I remember of.

Q. Mr. Fletcher, you testified on yesterday that in your opinion the cause of this explosion was the ignition of powder in room 16 of the 4th left entry, didn't you?

A. If I recollect right, I swore yesterday that it was at or near that point where the greatest effect of the explosion was shown.

Q. Now, did you or not on yesterday tell the jury that in your opinion, as the mine inspector, and from what you saw after that explosion, you were of the opinion that it was caused by the ignition of powder from a windy shot in room 16 of the 4th left entry?

Mr. TWITCHELL: Objected to as improper cross-examination.

A. No, sir.

Q. You did not on yesterday give it as your opinion that the explosion was occasioned by the ignition of powder by a windy shot in room 16?

A. No, sir, I did not state as it was from a windy shot, to my best recollection.

Q. Did you state that it was caused by the explosion of powder in room 16?

A. I stated that was what I found around there, powder kegs, opened; that in my judgment the explosion was from the effects of powder; if I recollect right that was my statement yesterday.

Q. But you did not say that it had its seat in room 16, or words to that effect?

162 A. At or near or between 16 and 17; I think I said, I think that was my evidence.

Q. Didn't you testify on the former trial that in your opinion that the explosion had its seat in room 17 or 18?

A. Not as I recollect.

Q. Were you not upon your former examination on the former trial of this cause asked this question: "Q. You are quite confident that this explosion occurred, had its seat, its origin, in room 17, and grew out of a windy shot?" and did you not answer: "A. Between No. 17 and 18, I said, where the seat or the origin of the greatest effects were shown." Did you not so testify on the former trial?

A. I testified on the former trial, but to my recollection just the spot I thought it was between 16 and 17.

Q. Then you say you did not testify upon the former trial that you thought it was between 17 and 18?

A. I could not recollect.

Q. Well, if you did testify upon the former trial that you thought it was between 17 and 18, was that true or false?

A. The effects from the explosion showed its greatest force around that locality.

Q. Now, have you any opinion at this time as to where that explosion had its seat, its origin?

A. Yes, I think it was caused——

Q. Where? I don't ask you how it was caused; where did it have its origin?

163 A. At or near around between 16 and 17, I would say.

Q. And not in 15 or 18?

A. Well, judging to my best recollection of the inspection, that would be my judgment in the matter.

Q. You testified on yesterday, that you saw no indication in the 4th left entry of the White Ash mine at the time of your inspection of a gas explosion, did you not?

A. No, sir, I said powder and gas, if I am not mistaken.

Q. Did you not say on yesterday in answer to a question by Mr. Twitchell that you saw no evidences that gas had been exploded in the 4th left entry at the time of your inspection?

A. I said that I had seen the effect of the explosion from the effect of the explosion from powder.

Q. Did you say that you saw no evidences of the effect of an explosion of gas?

A. Yes, sir, I saw the effect in where there had been effects of burning on the props, canvas, etc.

Q. That is all evidence of gas explosion, is it?

A. Well, there is not the least doubt but what taking the powder and gas being generated in the mine, that the gas would be ignited with the powder explosion as the flame went through the mine.

Q. You haven't any doubt, have you, Mr. Fletcher, that a part at least of the devastation which was created in that mine was due to the explosion of gas?

164 A. I think there was gas connected with the powder, but the cause of the origin I think was from powder.

Q. You have no doubt, have you, that there was gas exploded in that mine on the 27th day of February, 1895, have you, in that 4th left?

A. Yes, you take for instance——

Q. Can you answer the question yes or no if you try your best?

(Question repeated.)

A. Yes. I think there was gas exploded.

Q. The force of a gas explosion always travels against the air——

A. Also other explosions.

Q. The force of a gas explosion always travels against the air, don't it, Mr. Fletcher?

A. Yes, it goes against the air.

Q. The force of a powder explosion is always expended towards the point of least resistance, is it not, Mr. Fletcher, without regard to air?

A. Why, it would start out with the air; it would start out that way, but it would expand towards the current; it would meet the gas and the gas would expand so rapidly she would go against the air current.

Q. Now, will you answer my question. The force of a powder explosion is always expended in the direction or directions of the point or points of least resistance?

A. Yes, when it is powder alone.

Q. And if powder and gas combined the force of the explosion will travel against air in all instances, will it not?

165 A. Yes, because it requires the air to feed the flame.

Q. You have no doubt about that now, have you?

A. I notice she always comes to where the air is.

Q. And travels against the air, don't it?

A. Yes, sir.

Q. You are positively certain of that and can't be mistaken about it?

A. No, sir, not from my observations that I have had going around through other places where explosions have occurred.

Q. Well, now, if this is so, a powder explosion originating in room 16, 17, 18, or 15, or between these rooms and the air was coming from these rooms to room 8, will you explain to this jury

how the body of Alexander Kelly in room 8 came to be burned and how there came to be fire on the props in that room?

A. Well, when the explosion would take place she would go to the face of those rooms that were nearest to it, and take, for instance, to the face of the entry any particles of gas that was generated in any of these rooms which would be ignited and through the dust from the force of the expansion of the gas so rapidly, would raise the dust and you would have a violent expansion, which would expand quite a distance until the force was expended.

Q. Such an explosion would go against the air, would it? You can say that coming from 15 to 8 room was going against the air, can you, Mr. Fletcher?

166

A. Why no, but when she took the back entry, the stoppings were blown out, she would take the fourth; she would go through the rooms and she would go right clear up to the 3d, which she did—it showed where the canvas was, the line of the canvas.

Q. Flame would?

A. Well, if there was flame enough.

Q. Now, do I understand it to be your theory and that you tell this jury that it is your opinion that the flame which burned Alexander Kelly in room 8 passed from 15, 16, 17, or 18 room, whatever it was, along the air current to the face of the entry and back through the air course and up through the stopping and through the necks of the room?

A. Why, she would go through the rooms; it would expand and go through the rooms through the cross-cut, which it was showed plainly she did; it would go to the face of the places sometimes if they were short, and keep on going until it would expend itself.

Q. Let us go back and get this question over again, but I want an answer, yes or no, whether this is your theory of this explosion?

A. I think they were burned from that explosion in that manner.

Q. That involves the idea that the flame travelled in a circle in that mine, don't it? That is, if it started from wherever it did start, 15, 16, 17 or 18 room, and went all the way around that air course, and back to the point of beginning.

167

A. No, I don't think as it went back to the point of beginning at all.

Q. How did it get from room 8 to the point of beginning, if it had a point of beginning in room 16, 17, 18 or 15?

A. Well, it could have come down the 4th left and went up the mouths of the rooms or room-necks, or it could have taken the cross-cuts right through the faces.

Q. In your opinion did it go up the necks of the rooms?

A. I think it went through the cross-cut.

Q. Wasn't there conclusive evidence that that flame spread through the cross-cuts towards the face of the entry, from room 8 up to the face of the entry or to 18?

A. Not as I recollect.

Q. You saw nothing of that, sir?

A. Well, I saw where there had been canvas strewn and kegs as I spoke of, and props charred, canvas brattice, which was an indica-

tion that the explosion had been through there. It must have been through there, and some men would have been burnt.

Q. And it must have gone against the air to get through there, musn't it?

A. Well, it could have gone against the air and blown out these stoppings.

Q. Answer my question yes or no; must have gone against the air to get through there?

A. Yes, it did go against the air there.

168 Q. What experience, of your personal knowledge, had Donohue had as a pit boss at the time of his appointment as pit boss in the White Ash mine?

A. Well, he had, I don't know of any particular place where he had acted as mine foreman, but he was a man that had a great deal of experience in mines all his life, and I knew from works that he had done around other mines that I had met him as a miner.

Q. Did you understand me to ask you his qualifications? I asked you what experience he had as a pit boss in mines prior to his appointment as pit boss in the White Ash mine?

A. I could not answer that question; I don't know.

Q. Of your own personal knowledge what experience had Kilpatrick had as a pit boss in mines prior to his appointment as pit boss in that mine?

A. Well, I had known Mr. Kilpatrick for seven years, working at the Carthage mines.

Q. He had men working under him as pit boss?

A. No; McKinley was mine foreman.

Q. Do you know that when I ask you about a man's experience as pit boss, I don't want you to tell about his experience as something else? Now tell this jury, if you know, whether Kilpatrick had men working under him as a pit boss?

A. I don't know.

169 Q. What experience as a mine superintendent had Duggan, of your knowledge, at the time of his appointment to be superintendent of the White Ash mine?

A. I never knew Mr. Duggan until he got the appointment as superintendent at Madrid.

Q. Do you know when that was?

A. I could not tell the exact date.

Q. Do you know that Mr. Duggan had not been underground in a mine for eight years at the time he was appointed superintendent of the White Ash mine?

Objected to as improper cross-examination based upon a fact not in evidence.

A. Well, from the connection that I had with Mr. Duggan after his appointment as superintendent of the Madrid mine, going through the mines as I did, I should judge hundreds of times, I knew he was a careful, competent man.

Q. Do you think that is an answer to the last question I asked you, Mr. Fletcher?

A. I don't know; I answered that I didn't know Mr. Duggan before he arrived at Madrid in regard to his competency or not.

Q. Do you know that Mr. Duggan had not been underground in any kind of a mine for eight years prior to his appointment as superintendent of the White Ash mine?

A. I don't know it.

Q. Didn't you hear him testify to that under oath on the former trial of this case?

A. I remember it, but I forgot it.

Q. Do you know or did you know, that Mr. Duggan, at the time of his appointment as superintendent of the White Ash mine,
170 could not take a safety lamp and go into a mine and inspect it for gas, and that he never had handled a safety lamp in his life?

Objected to as improper cross-examination. Objection overruled. Defendant excepts.

A. He had a man appointed down below there; men that were supposed to do that.

Q. Do you think that is an answer to the last question I asked you?

A. I think that is an answer. Give it to me; I will give it as closely as I can.

Q. Question repeated.

A. If he could not, I don't know it.

Q. Would you consider a man to be competent for superintending the White Ash mine who had absolutely no practical experience in operating a gasy mine prior to his appointment and who could not take a safety lamp and go into a mine and inspect it for gas?

A. Why, a superintendent could fill that position of superintendent of the mine without going into the mine, if he had competent men below.

Q. And it was no part of Mr. Duggan's business to go into the mine then?

A. Not if he has competent men there to run it.

Q. Was it not part of Mr. Duggan's business as you understood it, to go into that mine and personally know the condition of the working places and air courses in it?

A. I know as he did go down into it.

Q. Question repeated.

171 A. Yes, it was his duty to go down.

Q. Is a man who don't know how to operate a safety lamp in your judgment a competent superintendent to go down into a gasy mine and personally examine into the condition of the working places?

A. I would say not.

Q. What amount of air in your opinion, as an expert, was necessary to expel from the White Ash mine all of the noxious gases which were generated in the working places of that mine?

A. I think 25,000 cubic feet would ventilate the mine if it was carried to the faces.

Q. Is it your opinion that in order to get proper ventilation of that mine, it was necessary to get 25,000 cubic feet of air per minute going to the working faces of that mine?

A. No, I don't think it did require it.

Q. Well, how much in your opinion was necessary to be carried to every working face of that mine in order to expel the noxious gases which might be generated there at and prior to this explosion?

A. 4,000 or 5,000 feet would dilute or carry off any gases that was given off there.

Q. No doubt about that, is there, Mr. Fletcher?

A. Well, from what had been generated in the mine from time to time.

Q. There is no doubt that 4,000 or 5,000 feet of air per minute carried to all the working places in that mine would expel all the gases, is there?

A. I am sure it would.

172 Q. Well, then if the gas was not all expelled, it is proof certain that there was not 4,000 or 5,000 feet of air per minute going to the working places?

Objected to as calling for the conclusion of the witness, leading, and improper cross-examination, and everything else that could possibly be shown against it. Objection overruled. Defendant excepts.

A. It might have been got to all the working places except where connections were not made with cross-cuts or bratticed in close to the face.

Q. Well, if there was gas accumulated or accumulating at any one working place in the mine, is it not a self-evident proposition, Mr. Fletcher, that there was not a sufficient quantity of air going to that particular working place to expel that gas?

A. Well, there would not be enough to go up to that particular place.

Q. Well, given the proposition that gas extended across the face of the room and 10 or 11 feet down from the face, does not that conclusively prove that there was not at that time a sufficient quantity of air going to that particular working place to expel that gas?

A. Well, the canvas might not have been up to the face.

Q. Let us try a yes or no answer once for a change.

A. I will say there was not.

Q. You said, I believe, on your direct examination, that as you understood the workings of that White Ash mine and the

173 method of ventilation, of the air which passed from the 4th left, or working places on the 4th left entry, all of it had to go to the 3d left and the 3d left could get no air which had not first gone through all of the working places on the 4th, didn't you?

A. Yes, sir.

Q. Do you know that at the time of this explosion and for ten days or two weeks before there was a direct opening from the par-

allel air course through to the upper air course on the 4th left plane?

A. No, sir; if it was made, why it was made in my absence.

Q. If there was any such opening any air which escaped into the 4th left plane, would, after supplying the men there, go, after supplying other men on the 4th left, directly to the 3d left, would it not?

A. Yes, sir.

Q. Would not air which escaped from the main slope into the 4th left go to the plane or on to the 3d left without going through the other working faces on the 4th left?

A. If there was any escaped, but it was not supposed to escape; there was a door there to check it.

Q. But if it did escape it would go that way?

A. Yes, sir.

Q. If there were any leaks in the stoppings going into the plane of the 4th left, it would go to the 3d left in the same manner without going to the other working places, on the 4th left, would it not?

174 A. That would depend, Mr. Field, upon what stoppings it leaked through.

Q. If it ever leaked into the 4th left plane, it would go right on in the direction that I have pointed out to you without regard to where it came from, would it not?

A. There is no stoppings connecting the plane of the 4th left between the slope and the plane.

Q. Did you understand me to ask you anything about any such thing? (Question repeated.)

A. Yes, sir.

Q. And if it got into the 4th left main entry it would go that way also, would it not?

A. Well, it would if there was not a check, that is a curtain on the plane, then it would take the 4th left, up to what room connected its cross-cuts to the plane?

Q. Every time the door was opened some air came through, didn't it?

A. Yes, sir.

Mr. FIELD: I think that is all.

Court adjourned till 2 o'clock, p. m.

Court met pursuant to adjournment.

Redirect examination.

By Mr. TWITCHELL:

Q. Did you hear the testimony of Mr. Ray?

A. No, sir,

Q. Supposing that there had been gas at No. 8 room in the 4th left entry and there had been the usual fire boss's danger signal

175 place- there, state whether or not as far as the security and protection of property and life in that mine was concerned

everything had been done by the placing of that fire signal for the protection of life and property in that mine?

Mr. FIELD: Objected to as not proper redirect examination.
Objection overruled. Plaintiff excepts.

A. He had performed his duty, yes.

Q. Tell me, in answering that question, Mr. Fletcher, whether everything had been done as far as the duties incumbent upon the officials charged with the protection of life and property in that mine had been performed?

Mr. FIELD: Object to that question because that is exactly what this jury is sitting here to determine.
Objection overruled. Plaintiff excepts.

A. Yes.

Q. Now, Mr. Fletcher, supposing that the body of the miner, Kelly, whose body was found in a cross-cut between rooms 9 and 8, was found in the condition testified to by the witness, Mrs. Kelly, in a burned and broken condition, and supposing the body of the other miner found in room 8 was found at a point further up the railroad track towards the face of room 8, was not burned how do you account for that fact?

Mr. FIELD: Objected to as a hypothetical question not based upon any evidence in the case, and also improper redirect examination.

176 Objection overruled. Plaintiff excepts.

A. Well, that would show that Kelly was in the line of the explosion and that the explosion or flame did not go up to the face of room 8 or else Flick would have been burned.

Q. In your cross-examination, Mr. Fletcher, you testified with refence to the flame following an explosion and the direction which it would take, I will ask you now, upon the theory which you have advanced with reference to the cause of this explosion and where it originated, what would be the difference of time between an explosion or igniting by the ignition of powder and the consequent ignition of gas at whatever place it might be found in the rooms turned off of the 4th left entry.

A. It would be almost instantaneous.

Q. I understand you then to testify that if the origination of the explosion was in the neighborhood of room 16 or 17 and caused by the ignition of powder, according to your theory of this case, that there would have been an instantaneous explosion of different quantities of gas that may have been in any part of the 4th left entry of the rooms turned off the same?

A. Yes, sir.

Q. Then if gas in consequence of the powder explosion were ignited in rooms 12, 11, 10, or 9, or 8, what would have been the effect so far as flame is concerned instantaneous with the powder explosion?

A. Why, it would be an instantaneous flash, a flash as quick as lightning.

177 Q. Do you know how long it was from the time of the appointment of Mr. Duggan as superintendent of that mine to the time of that explosion?

A. I don't know, I rather think it was about two years, if I am not mistaken.

Q. State whether or not during those two years you were inspector of the White Ash mine under your employment?

A. Yes, sir.

Q. State whether not during those years as inspector you knew of your own knowledge as to Mr. Duggan's competency to perform the duties incumbent upon him in the proper management of the White Ash Mine property?

A. Yes, I think he was competent to fill the position.

Q. If there had been no current of air at the face of room 8 at the immediate time of this explosion, would there have been any current of air at the face of room 9?

A. No, I don't think there would.

Q. If there had been no current of air at the face of room 8 at the time of this explosion would there have been any current of air at the face of room 7?

A. No, sir.

Q. If there had been no current of air at the face of room 7, would there have been any current of air on the plane-room of the 4th left where the men were working at the time of the explosion?

A. No, sir, not as I know of.

178 Q. You heard the question propounded by Mr. Field this morning with reference to some sort of break-through or opening from the parallel air course, left parallel, about which there is question which would seem to be intended to convey the idea that air would be conveyed to persons working on the plane of the 4th left; what, if anything, do you know about any such opening?

A. Not any.

Q. If there had been a door or a break-through there in the conduct of the air through that mine would it have been opened or closed?

A. Closed.

Q. Do you know anything about any such door?

A. I do not.

Q. Were you in the habit of going through that mine?

A. Yes, sir.

Q. Did you ever go through any such door?

A. No, sir.

Q. Did you ever know of anybody going through any such door?

A. No, sir.

Q. I will ask you what any two men going into room 8 and finding the brattice in that room down, would have done if they had seen a danger signal lying across the track in that room.

Mr. FIELD: Objected to as a hypothetical question, not based upon any evidence in the case and not proper redirect examination.

Objection overruled. Plaintiff excepts.

179 A. They would have fixed up the brattice; they never would have crossed that line.

Q. Supposing in order to fix up that brattice it would have required them to cross over the danger mark, would they have crossed the danger mark with a naked light?

A. No, sir.

Q. I will ask you whether a man going into room 8 through the upper cross-cut from room 9 with a naked light could tell whether or not there was a current of air passing in its usual course towards the face of room 8.

A. No, sir.

Q. I will ask you whether or not a miner working in the White Ash mine in passing through the cross-cut from room 9 into room 8 and going towards the direction of the face of the room, and finding danger signals, would continue in that direction, or in the performance of any duty beyond that danger signal.

A. No, sir. That would be—I would like to explain that a little further. That would be beside the fire boss himself.

Q. I mean to go over that danger signal with a naked light?

A. No, sir; never would.

Q. Do you know whether or not at the time of the explosion or just prior thereto within a month or so, there was any change in any rule with reference to the amount of powder which miners were permitted to bring into the mine for the purpose of pursuing their work in mining coal?

180 Mr. FIELD: Objected to because not proper redirect examination; because the witness said upon his cross-examination that he didn't know that there was ever a rule with reference to the amount of powder which the miners were allowed to take down in the mine and conclusively if he didn't know there was a rule he could not know about the change.

Objection sustained. Defendant excepts.

Q. I will ask you then if you know—I will withdraw that question in the first place. I will ask you if you know how many pounds of powder a miner was permitted to take down into the mine and keep in the room at any one time, as mining inspector of that mine, from your knowledge of the custom?

Objected to. Objection overruled. Plaintiff excepts.

A. They used to take down 25-pound kegs.

Mr. FIELD: Objected to as not responsive to the question.

The COURT: The answer of the witness last given, that they used to take down 25-pound kegs is withdrawn.

Q. Question repeated.

A. Yes, sir.

Q. How many pounds was it?

Mr. FIELD: I object to this question as to evidence as to this custom because if it was not in accordance with the rules of the mine, by which the men were bound and which they signed, it is not
181 competent or proper to show anything of this kind again. What I mean by this is: Here were rules which regulated this subject and which the men signed when they went to work; now anything different or anything different from that I submit is incompetent in this case. Here is the rule.

Mr. TWITCHELL: I object to the reading of any rule; we are relying entirely upon the cross-examination.

Mr. FIELD: Objected to upon the ground that the quantity of powder which a miner was allowed to take down into the mine was regulated by a contract in writing between the miner and the company.

Objection overruled. Plaintiff excepts.

A. I say they took a keg which contains 25 pounds.

Q. With reference to Mr. Kilpatrick, Mr. Fletcher, prior to the White Ash mine explosion what official positions with reference to the operation of coal mines had you known him to occupy in this Territory?

A. He was acting foreman at one time at Carthage, New Mexico, and he filled the position as night foreman at the Hard Coal for some time.

Recross-examination.

By Mr. FIELD:

Q. Mr. Fletcher, if it should turn out in the evidence in this case that Mr. Flick's body was burned by flame, this new theory
182 that you have vivified since we adjourned would be exploded, would it not?

Mr. TWITCHELL: Object to any evidence to that effect.

Objection overruled. Defendant excepts.

A. Well, if he was not burned there was no flame up there.

Q. And if he was burned there was flame up there?

A. Yes, sir.

Q. And all of your explanation which you made to Mr. Twitchell based upon the idea that Flick's body was not burned would go for naught, if the evidence shows that Flick's body was actually burned, would it not? Now, I want an answer, yes or no.

The COURT: He can answer yes or no and then he can explain.

A. Why, no.

Q. Your explanation is the same whether Flick's body was burned or not burned, is it?

A. My explanation was that the flame was——

Q. Answer the question yes or no.

The COURT: I told him he had a right to explain.

Q. Your question is the same whether Flick's body was burned or not?

A. Yes, in regard to the props not being charred at the face of No. 8 room.

Q. In your opinion the question as to whether Flick's body was burned or not burned throws no light upon the question as
183 to whether there was a current of air going to the face of room 8 at the time of the explosion or not?

A. No, sir, it does not.

Q. Look at the book shown you which is Exhibit "B," and rule 13, entitled "Distribution of powder" in that book, and stated whether or not that was a rule of that mine formulated by you or under your direction.

Mr. TWITCHELL: Objected to as immaterial, if court please; there has been no testimony whatever, either on redirect or cross or direct, with reference to rules.

Objection overruled. Defendant excepts.

A. No, sir, the rule was not formulated by me.

Q. Nor under your direction?

A. No, sir.

Q. And you never knew the existence of any such rule?

A. No, sir.

Q. In your opinion as a mining superintendent was such a rule necessary for the protection of the men working in that mine?

Mr. TWITCHELL: Objected to as improper recross-examination.

Objection overruled. Defendant excepts.

A. Why, I would consider it more beneficial to the protection of the men to take in five pounds instead of 25.

Q. Then, as I understand, you think that such a rule was
184 reasonable and necessary regulation in the manner of handling powder in that mine for the protection of the men?

Objected to. Objection overruled. Defendant excepts.

A. I don't think it was necessary.

Q. Then, as I understand you, you think that such a rule was an unreasonable and un-ecessary regulation?

Mr. TWITCHELL: Objected to; his answer does not imply that it was unreasonable.

A. No, I don't think it was unreasonable.

Q. Then in your opinion, it was neither reasonable nor unreasonable?

Objected to as immaterial. Objection overruled. Defendant excepts.

A. Well, it would be more safety to the men.

Q. A habitual violation of that rule would add to the danger of the men working in that mine, would it not?

Mr. TWITCHELL: Objected to, if the court please, as a hypothetical question based upon facts not in evidence, there being no proof here of any violation of the rule and the only proof being as to the custom of the miners in the use of powder in a room.

Objection overruled. Defendant excepts.

A. It would if it were exploded.

185 *Rebuttal.*

By Mr. TWITCHELL:

Q. But it is a fact, nevertheless, is it not, Mr. Fletcher, that it was customary for the miners to take 25 pounds of powder into this mine and that fact was well known to every miner working on the 4th left entry of that mine, for a considerable time prior to that explosion and at the time of the explosion?

Mr. FIELD: Objected to as calling for a conclusion and opinion of the witness.

The COURT: If he knows he can answer. Objection overruled. Plaintiff excepts.

A. I have noticed, as I said before, I have noticed them taking kegs of powder down which contains 25 pounds. In regard to the men on the 4th left entry I could not say whether they would be acquainted with the matter or not, all of them.

Q. What was the capacity of every exploded powder can that you found in these entries and these rooms after the explosion was over; how many pounds will a can hold?

A. They were 25-pound cans.

Witness excused.

Mr. CLANCY: We desire to offer that (Exhibit "B") as part of the cross-examination of Mr. Fletcher, rule 13, to which reference was made.

Mr. TWITCHELL: Objected to. Their time to use it was in connection with their case-in-chief, and it is improper to lug them in in connection with cross-examination, and there was nothing
186 said with reference to these rules in direct examination. Objected to on the part of the defendant as an improper introduction of rule 13, Exhibit "B" by the defendant upon the testimony admitted to be brought out on cross-examination of plaintiffs with reference to a matter not referred to in the rule, being testimony on the part of the defendant as to a custom.

The COURT: I will admit this upon the statement of counsel that if not offered now it would be offered in rebuttal.

Defendant excepts.

EXHIBIT "B," Page 29, Rule XIII.

Distribution of Powder.

For the safety of the miners the company has appointed a man on top of the mine for to deal out the powder to the men. No miner is allowed for to take down more than one five (5) pound powder can in the pit for one day's work; and each and every miner is to have a box in his place for to keep the powder in.

WILLIAM KILPATRICK, called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age and occupation.
A. William Kilpatrick, 30 years of age, miner.
Q. What was your business on the 27th day of February, 1895?
A. Night foreman of the White Ash mine.
187 Q. Do you know of anything that happened at the White Ash coal mine on the 27th day of February, 1895?
A. Yes, sir.
Q. What was it?
A. An explosion.
Q. Do you know where that explosion occurred, of your own knowledge?
A. In the 4th left entry.
Q. Do you know in what part of the 4th left entry the explosion occurred?
A. No, sir.
Q. How long have you been a coal miner, Mr. Kilpatrick?
A. Over 16 years.
Q. Are you familiar with all the workings of coal mine-?
A. Yes, sir.
Q. How long had you been familiar with the workings of the White Ash coal mine at the time of this explosion?
A. For almost two years.
Q. Where had you worked prior to your employment in the White Ash coal mine as a coal miner?
A. In Scotland, Pennsylvania, Ohio and New Mexico.
Q. Where had you worked in New Mexico besides the White Ash coal mine?
A. In Carthage, Socorro county, and in the Hard Coal at Madrid.
Q. You mean by the Hard Coal, the Hard Coal mine at Madrid?
A. Yes, sir.
188 Q. Look at that map over there and state whether or not you are able to identify the workings of the White Ash coal mine on the 27th day of February, 1895, from that map?
A. Yes, sir.
Q. Do you know how the White Ash mine was ventilated?
A. Yes, sir.
Q. How was it ventilated?

A. By a fan at the mouth of one of the air courses on the outside.

Q. Point out on the map the exact location of that fan.

A. On this here (indicating).

Q. Did this fan drive air into the mine or exhaust air from the mine?

A. It exhausted air from the mine.

Q. Using that map can you show the jury the course of the air in its course through that mine on the morning of the 27th of February, 1895?

A. Yes, sir.

Q. Please show the course of the air through the left side of the mine.

A. Going in at the mouth of the main slope, traveling direct down the main slope to the bottom cross-cut, and coming up the back slope to the 7th left back entry, going along the 7th left back entry to the face of that entry, through the 7th left back, through a cross-cut at the face of the entry, on to the main entry and returning on the main entry to the return air course and the back slope, up the back slope to the 6th left back
189 entry, to the face of the 6th left back entry, going through the cross-cut into the main entry of the 6th left, returning back along the 6th left, going up the return air course of the 6th left to the back slope, up the back slope to the 5th left back entry, going through the cross-cut to the 5th left back entry, going through this cross-cut to the 5th left main entry, returning back along the 5th left main entry to No. 1 room of the 5th left back entry up to the 4th left back entry, going along the 4th left back entry to the face of the 4th left back entry, going through a cross-cut at the face of the 4th left back entry or on the main entry of the 4th left, coming back out of the 4th left main entry by bratticing from the face of 18 room back behind that brattice up to 17 room, up 17 room through a cross-cut into 16 room, and through a cross-cut into 15 room, through a cross-cut in 14 also 13, also 12, also 11, also room 10, room 9, room 8, room 7 and rooms 6, where a split was made on room 6 by a canvas, allowing the larger bulk of this air to go into the 3d left back entry and sending a part of this air from room 6 through the cross-cuts into 5, 4, 3 and 2, down No. 2 room on to the main entry, up to the plane of the main entry, up the plane and into No. 1 room of the plane, through every cross-cut, from No. 2 room on the plane into No. 3 of the plane, out of No. 3 room up to the plane again, then through a cross-cut off the plane into No. 1 room of the 4th left, up No. 1 room of the 4th left into the back entry of the 3d left, traversing the entire course of the 3d left back entry, through a cross-cut into the 3d left main
190 entry back from the main entry into all of the rooms of the 3d left back entry, to No. 8 room of the 3d left, where it came up into the back entry of the 2d left, and back through into the main entry of the second left, and through this series of rooms on the 2d left into the back entry of the 1st left, back through into the

main entry of the 1st left taking its course to the overcast, and going in a direct course almost to the fan.

Q. Mr. Kilpatrick, do you know what a gaseous mine is?

A. Yes, sir.

Q. As to being a gaseous mine or not state what was the White Ash?

A. The White Ash was a gaseous mine.

Q. I would like to have you, before proceeding further, state what was the character of the cross-cut, of the stoppings and the cross-cut along the main slope and in the cross-cuts between the main and back entries of the 4th left and of the 3d left, and 2d left in the White Ash coal mine just prior to the explosion?

A. The stoppings in cross-cuts from the main slope to the parallel slopes were posts, board posts, set about 3 in the line, one at each rib and one in the center; then probably about a foot from these posts would be three more posts set opposite these three that had been put up; then who ever has putting in the stoppings would get into the solid coal on each side and nail from the floor to the ceiling, on the outside of these props, these two rows of props,

191 plank, then fill in up towards the roof with sand; these were all the way down the main slope along the 4th, 3d and 2d.

Q. Now, with reference to being air-tight or approximately air-tight, how were these stoppings?

A. There would be very little leakage.

Q. Now, with reference to the cross-cuts between the main and back entries on the left side of the mine?

A. In the cross-cuts between the main and back entries would be three props set, one at each rib and one in the center of the cross-cut, and whoever was putting in the stoppings could get into the rib, and nail plank to these props lapping each board in this manner, about one-half or ¾, probably an inch over one another, and then nailed over any openings they might see, or seams in these boards, pieces of canvas, and throw all loose dirt there would be, on each side of this board stopping in the cross-cut or in the entries up against that stopping, against these boards.

Q. What was the efficiency of these stoppings in the matter of turning air?

A. They were good.

Q. How, if you were making the effort, would you detect any leakage in any one of the stoppings?

A. By examining the stopping with a naked light you could detect any leakage there might be of air on the blaze of your lamp.

Q. How was coal mined in the White Ash mine on the 27th day of February, 1895?

A. Blown out of the solid.

A. How then was it taken out of the mine?

192 A. Loaded into pit cars by the miners and hauled up by mule power to the parting, hoisted by cable from the power to the top, by wire rope.

Q. What do you mean by a parting?

A. A double track made——

Q. Show on the map? In the 4th left entry for instance, show the parting.

Q. The parting on the 4th left was right here; two tracks with a pillar between, 200 feet from the main slope or 250 feet, commencing at 170 feet would be over 100 feet of parting or about 100 feet of parting and 100 feet of double track.

Q. When were you in the White Ash coal mine last prior to the explosion?

A. A few minutes before five o'clock on Wednesday morning.

Q. How long was that before the explosion occurred?

A. About six hours.

Q. What had you been doing during the ten hours previous to the time you left the White Ash mine on the morning of the explosion? Where were you in the mine and describe what you did that night.

A. Oh, I had been all over the mine, in every working place in it and out and in the different entries several times.

Q. Now, I want you to tell the jury what time on Tuesday night you went to work in the White Ash mine?

A. I got to the cabin above the 2d left every night a few minutes before 7 o'clock.

Q. Well, on Tuesday night prior to the explosion, did you get there at that time?

193 A. Yes, sir. Left my dinner pail and coat there and stayed there until every miner had passed the fire boss that had not gone in before me.

Q. Now, tell the jury exactly what you did from the time you left the fire boss' cabin until you left the mine on Wednesday morning, if you can remember at this time, if you can remember.

A. I went in the 2d left.

Q. Can you point out on the map where you went, so the jury can see?

A. Yes, sir. Going into the 2d left main entry, I would visit——

Q. Where you went that night, if you remember?

A. That is entirely too long for me to remember. I had a custom in traversing that mine.

Q. You state that you had a custom in traversing that mine, Mr. Killpatrick; state whether or not you followed that custom on the night prior to the explosion.

A. Yes, sir.

Q. Can you tell the jury what was your custom in traversing that mine?

A. Yes.

Q. Well, if you can, please point it out on the map, or if you can testify from where you are sitting, do so.

A. I would generally go to the 3d left parting with the boss driver, from the 3d left parting down to the 4th left parting, then go on in the 4th left and go through the working-rooms of the 4th left and come out along the back entry to the slant in the

194 4th left, and go up the plane of the 4th left to where the working places are up there, and come back down, go through

a sliding door inside the trap-door of the 4th left main entry; down into the back entry of the 4th left, back on to some pillars on the 5th left, go through these pillars that were working, down into the 5th left main entry, go down to the 6th left main entry, and go through across from the 6th left to the 6th right, go up the plane of the 6th right to some places that were working up there, and from the 6th right plane come out on the slope and go into the 5th right and go up the plane to some places that were working there, and come out on the slope and go into the 5th right, into a place that was working there; come out on to the slope, go into the 4th left parting again, and go up the back slope from the 4th left parting, to the 3d left, go into the 3d left entry to the working place in that entry and come back out, sometimes up No. 8 room in the 2d left, sometimes out on to the main slope into the 2d left, and sometimes go to the cabin about midnight. After midnight I generally went into the 2d right to some places working there, and come out and go wherever I thought it was necessary for me to go, anywhere the balance of the night.

Q. Did you state what your position was there at that time?

A. Night mine foreman.

Q. And you were mine foreman of the mine the night prior to the explosion?

A. Yes, sir.

Q. How long had you held that position?

195 A. Six or seven weeks.

Q. State whether or not on your journeying through the mine on the night which you have just related you took notice of the condition of the air and the ventilation of the mine at the various places visited by you in the White Ash mine and particularly in the 4th left entry of the mine?

A. Yes, sir.

Q. What was the ventilation, good or bad?

A. Good.

Q. Tell the jury, now, when you know when air circulation in the White Ash mine is good?

A. As mine foreman traveling through the working places of the mine, conversing with the miners in their working places, hearing no complaint from them and from actual tests made by my pit lamp in my hand at the end of the brattice in each working place and in cross-cuts from room to room, and in cross-cuts from back entry to main entry.

Q. That is the way you would ascertain that the ventilation was good?

A. Yes, sir.

Q. Was that part of your duty in the White Ash mine on the night prior to the explosion?

Objected to.

Q. What was your duty with reference to inspection of the air in the White Ash mine on the night prior to the explosion?

A. To examine in all of these working places the condition of the

brattice in each place and the condition of the air going around the brattice, the condition of the trap-door, curtains on the
196 main entries, cross-cuts and the actual route that the air traveled.

Q. Do you remember whether or not on the night prior to the explosion you inspected the air course or the ventilation in that mine from room No. 1 turned off of the 5th left where it connected with the 4th left back entry?

A. Yes, sir. That was one of the principal places to try the air with a naked light. With permission of counsel I will mark that point X upon the map.

Q. I will ask you to state what was the condition of the air at the point where room No. 1 of the *2th* left connects with the 4th left back entry on the night prior to the explosion, good or bad?

A. Good.

Q. I will ask you to state whether at any time during the night prior to the explosion you were in the last cross-cut between the main and back entries of the 4th left?

A. Yes, sir.

Q. Was that a part of the air course or not?

A. The last cross-cut of the 4th left back entry connecting on the main entry?

Q. Yes.

A. Yes, sir.

Q. Did you inspect the air then?

A. Yes, sir.

Q. How was it?

A. Good.

Q. How was it with reference to the condition of the air at that point relative to every inspection you had made for every
197 night prior to the night of the 26th day of February, 1895, for two weeks?

A. There was no perceptible difference.

Q. Then how was it at the point X, being the point where room 1 of the 5th left is broken into the 4th left air course, for two weeks prior to the explosion?

A. There was never any difference there either.

Q. Were you up at the face of the 4th left main entry on the night prior to the explosion?

A. Yes, sir.

Q. How far was it from the last cross-cut between the back and main entries of that 4th left to the face of the 4th left?

A. About 100 feet I should judge.

Q. How was the air carried up from the last cross-cut between the main and back entries of the 4th left to the face of the 4th left?

A. By brattice.

Q. State whether or not the entire current of air passing through the 4th left air course was conducted up to a point near the face of the 4th left main entry, the entire volume of air coming into the 4th left back entry, was carried to the face of the main entry by this brattice.

A. Yes, sir, that is, it would be, except for the leakage through the curtain across the entry.

Q. Now, was this curtain which was used for the purpose of taking the air up to a point close to the face of the 4th left place nearer the lower side of the entry or the upper side of the entry?

198 A. The track would be along the lower side of the entry and the curtain just as close to that track as the pit cars would permit in operating it, and the top side of the entry was for the air to return in.

Q. This air coming from the 4th left air course would pass through a space, would it not, Mr. Kilpatrick, smaller in going to the face of the entry than was possible in passing through the entire main air course of the 4th left?

A. Yes, sir.

Q. And after the air has reached the face of the 4th left entry on its return down the 4th left it would occupy a much wider space, would it not?

Objected to as leading.

Q. Than the air—state whether or not the air after it reached the face of the 4th left main entry on its return down the 4th left main entry would occupy a much larger space, would it not, than it did in going up to the face of the entry from the last cross-cut between the back and main entry.

A. Well, the track on the——

Q. Answer yes or no whether there was more space in there between the curtain and the top of the entry than there was between the curtain and the foot of the entry.

Counsel for defendant withdraws that question.

—. How far from the top side of the 4th left main entry was this brattice which you said was placed beginning at a point at the last cross-cut, between the back and main entries of the 4th left up to a point near the face, was it the middle of the entry or was it to one side, and if so, to the lower side or to the top side?

199 A. The brattice would be on the top side, almost in the middle of the entry.

Q. State whether or not there was any difference in the dimensions of the back entry and the main entry of the 4th left as to height and width.

— ——.

Q. I will ask you now whether or not you made an inspection of the White Ash mine systematically during your employment as night pit boss in that mine.

Objected to as leading. Objection sustained. Defendant excepts.

Q. I will ask you to state whether or not—how often—I will ask you to state how many such inspections you made during your employment as night pit boss?

A. Every night at least once and sometimes at important points two or three times, just as I happened to be there.

Q. How often would you make the examination and inspections in this matter of ventilation?

A. Every night.

Q. Would you make, state whether or not you would make any inspections as to the presence of gas?

A. No, sir.

Q. If you were making inspections for gas what would you do?

A. I would have a safety lamp instead of the naked lamp, instead of the pit lamp.

200 Q. Did you ever make any inspections in the White Ash mine while you were night mine foreman for the presence of gas?

A. Yes, sir.

Q. When and where?

A. On the Saturday night preceding the explosion.

Q. Any men in the mine?

A. No, I took the fire boss's place on that night.

Q. State what you did.

A. I examined every working place in the mine with a safety lamp.

Q. This was on the Saturday night prior to the explosion?

A. Yes, sir.

Q. Were you in room 8 of the 4th left on that night?

A. Yes, sir.

Q. How did you happen to go into room 8?

A. Room 8 was a working place on Friday night and coming back to No. 6 room on the 4th left I naturally of course went through that room into 7 and 6 on to the 3d left back entry.

Q. Did you go up to the face of room 8 on that night?

A. Yes, sir.

Q. State whether or not there was any brattice or curtain in that room at that time.

A. Yes, there was brattice from the cross-cut up.

Q. In what condition was the brattice?

A. In good condition.

201 Q. Did you find gas at the face of room 8 on that night?

A. In the upper left-hand corner of that room as you go into the room, going into the room from No. 9, going up the track.

Q. At that time state whether or not there was a current of air passing through room No. 8 and around the curtain which you said was placed there.

A. Yes, sir.

Q. When afterwards were you in room 8, the next time after that?

A. On Sunday night.

Q. What time Sunday night, if you remember, were you in No. 8 and how did you happen to be there?

A. Some time in the fore part of the night between 7 o'clock and midnight, just exactly the hour I could not say, two men were working there on Sunday night.

Q. Where were they working?

A. At the face of the room.

Q. Were the- working with naked lights or with a safety lamp?

A. They were working with naked lights, but had one safety lamp with them, between them for testing purposes for their own use.

Q. State whether or not you went up to the face of room 8 on that night.

A. Yes, sir.

Q. What was the character of the ventilation or air current passing through No. 8 room at that time as to being good or bad.

202 A. It was good.

Q. What function was it performing, if any, with reference to the gas which you said was being generated in that room?

A. It was carrying off the gas that was being generated in that room.

Q. Did you know Mr. Deserant and his two sons?

A. Yes, sir.

Q. Do you know in what room they were working at the time of the explosion of your own knowledge?

A. Yes, sir.

Q. What room were they working in?

A. 17.

Q. How long had they been working in any room on that 4th left entry, if you know?

A. I could not say how long they were working there; I know they were working there the week preceding the explosion on my shift, the night shift, and that they were men that didn't change rooms unless the room is finished, or something like that, and where you find them this week you will find them two weeks from that, when they come back to your night shift.

Q. State whether or not, Mr. Kilpatrick, in your capacity as night foreman, you ever had any occasion to perform any services for any one of the three Messieurs Deserant with reference to the air circulation in the room in which they were working, and with reference to any gas in the room in which they were working?

A. Yes, sir.

203 Q. When and what was it?

A. On the week before the explosion the oldest boy requested me in going my rounds, of the 4th left entry, to get into their place to take a safety lamp that the fire boss had given them when they came into the mine, and test a cross-cut that they were driving to connect 16 room. I took the lamp and showed him that there was a little body of gas perceptible in the lamp in that cross-cut, and got a piece of canvas and brushed it out for him, then tested it again and showed him there wasn't any, and told him to go ahead and work in there and try to put it through.

Q. Who was working in there with him at that time?

A. His father and the little boy.

Q. State whether or not you know whether the Messrs. Deserant were cognizant of the means used by the management of the White Ash coal mine to designate in a locality the presence of gas?

A. Yes.

Q. Were they or not?

A. They were. In asking me to take that safety lamp was positive proof that they were cognizant of the means used.

Q. In making your inspection of the various working places in the White Ash coal mine in your capacity as night foreman, state whether or not it was your universal custom to measure the air or to test the air, at the last cross-cut between the top and main entries of the 4th left?

Objected to as leading. Objection overruled. Plaintiff
204 excepts.

A. Yes.

Q. Now, I wish you would tell the jury what function or duty is performed by the air current in parsing through the various working places of the 4th left?

A. It furnishes respiration for men and mules, carries off any powder smoke from shots, and noxious vapors that may be generated in the mine.

Q. Now, do you know when the miners fired their shots in the White Ash mine on your shift, what were the regular appointed hours of firing on your shift?

A. For entries, except the 6th left entry, 9 till half past nine o'clock, 12 o'clock till half past 12, 3 till half past 3, and five o'clock.

Q. Why do you except the 6th left?

A. That was in a fault and had the privilege of shooting at any time, if my memory serves me right.

Q. What kind of powder were they using in shooting this fault?

A. Mostly dynamite and giant powder. Rooms shot at dinner time and five o'clock except a room turning which had the same privilege as an entry had.

Q. Do you mean by dinner time 12 o'clock at night?

A. Yes, sir.

Q. Whose business was it to see that these hours of firing were complied with?

A. My business on the night shift.

205 Q. Do you know what a windy or gunning shot is?

A. Yes.

Q. Tell the jury what a windy or gunning shot is.

A. A hole drilled in the solid coal five or six feet, that is taking too large a grip of the coal and is charged with an insufficiency of powder or not properly damped will blow out the tamping or the powder come back in a sheet of flame out of the drill-hole and leave the coal the same as if it had never been shot.

Q. Were these kind of shots of frequent or infrequent occurrence in the White Ash coal mine?

A. They were of very rare occurrence.

Q. Do you know how much powder was accustomed to be handled and used by the miners working in the 4th left entry on your shift?

A. Well, each two men working in a room would probably shoot four shots in the night, two at 12 o'clock and probably 3, and one

or two in the morning going home; they would have from 20 inches of powder to 2 feet, with a 2½-inch hole, in all about 8 feet of powder to the shift, about a foot to the pound, making 8 pounds.

Q. How was powder taken into that mine as far as the miners themselves were concerned?

A. In 25-pound kegs.

Q. State whether or not the night shift would leave its powder in the mine, what remained, after they went off work?

A. Yes, sir.

206 Q. Would that be also done by the day shift when they would go off work?

A. Yes, sir.

Q. Do you know what would be the effect of a windy or gunning shot upon the powder in the mine in the event of contact with flame from such a shot?

A. If the powder was in a powder keg and the flame got into the powder it would explode; if the powder was laying out of the powder keg on a piece of paper or something, it would simply add to the flame, but if found in the keg it would explode, the keg would explode with the powder.

Q. What effect does the explosion of powder have upon a 25-pound keg when it is exploded from the inside of the keg?

A. I have never made any investigation to find what effect it would have, but I have seen powder kegs rent asunder, torn all apart, that had had powder in it.

Q. Do you know what the effect is upon a powder keg from the explosion from the outside of the can, whether from powder or gas, or any other combustible or explosive of that kind?

Mr. FIELD: Object to that question because it does not give the witness enough of the elements of an explosion to enable him to answer intelligible.

Objection overruled. Plaintiff excepts.

Q. What effect would it have on the can, can you say?

207 A. It would just depend upon how much it was, throw the can around, it would bend it up, if it threw it against anything.

Q. Who was the judge, Mr. Kilpatrick, at the time you were mine foreman, of how a hole should be drilled and tamped and of the amount of powder which should be used in the firing of shots to knock down the coal in the rooms in the White Ash mine?

A. The miners themselves.

Q. Do you know what was the ordinary and usual size of cartridges used by the miners in the White Ash mine?

A. Well, the Hoosach drilling machine, the machine used by most of the miners, when the bits are just from the blacksmith shop, that is sharp, there is a bit on them that will make a hole of 2½ inches in circumference. The miners have a cartridge stick that they wrap paper on to make their cartridges.

Q. So that 2½ inches in diameter or 2½ inches in circumference would be the size?

A. Well, a cartridge stick, you would probably get your hand around, and the cartridge would go into their drill-hole.

Q. What time did you leave the mine on the morning of the explosion?

A. Went on a trip a few minutes before 5 o'clock from the cabin.

Q. What was the condition of the White Ash mine so far as safety to people working in it was concerned, and as to the air circulation therein at the time you left it on the morning of the explosion?

208 A. It was good.

Q. Now, whose duty was it to make examination, if any, as to the presence of gas in that mine?

A. The fire boss'.

Q. Who were the fire bosses at that time?

A. William Ray on the night preceding the explosion, and John Deighton on the morning of the explosion.

Q. What time, if you know, did Deighton go to work on the morning of the explosion?

A. Some time between 2 and 3 o'clock, I believe.

Q. Did you see him that morning?

A. I believe I saw him 2 or 3 times that morning at different places, but just where I cannot remember now. I generally seen him almost every morning, whichever fire boss it was, seen him probably two or three times.

Q. What was he doing, if you remember, at this time when you saw him?

A. He was going around the mine in his own way, with a Davy lamp in his hand, going whereever he thought it was a proper place for him to go.

Q. What were the duties of the fire bosses in the White Ash mine?

A. To make an inspection of each working place in the mine, and to stop at the cabin on the 2d left or above the 2d left on the main slope, and inform every miner that went into work as to the condition of his place, and if he had found any gas in it to give the miner a safety lamp out of the cabin and tell the miner

209 how much gas was in that place, to brush it out himself, if any brattice was necessary to tell him to wait until he would come and he would put up the brattice, or the foreman would come down—I always made it a custom to say "How is everything?" and whoever the fire boss would be he would tell me. I never got any other answer than "Everything is all right," that I remember of. And after the men had gone to work he would go wherever brattice was necessary to be put up, put it up, look over his curtains on the main entry, fix anything that was necessary on the trap-doors, and before he went off shift he generally cleaned a few lamps, whatever were dirty in the cabin.

Q. How long, Mr. Kilpatrick, would it take the fire boss to make the trip of inspection through the White Ash mine on the morning of the explosion as well as on the night before the explosion?

A. 3 or 3½ hours, from 3 hours to 3½ gave him plenty of time.

Q. State how fire bosses would indicate to miners working in the mine a dangerous place, or the presence of gas.

A. You mean with reference to the cabin, or at the place?

Q. At the place wherever there would be any danger.

A. They would throw either a tie or a piece of board across the track, or mark on the shovel the miner loaded the coal with, whatever would be most convenient, a sign, an X or a XX, X if there was a little there sufficient to ignite, XX if there was
210 sufficient that it needed to be brushed out before they went in to work.

Q. Was there anybody else allowed to make these marks in that mine, besides the fire bosses?

A. No, sir; fire bosses or a man acting as fire boss, such as on Saturday night when I made the inspection. On Saturday night I would have the privilege of making these marks on these places if I considered them dangerous.

Q. What intimation or knowledge would the presence or appearance of these marks convey to any person working in the 4th left of the White Ash mine on the day of the explosion?

A. They would give to any miner working on the 4th left entry, or any one working on the 4th left entry, the intimation as to whether the room was making gas or not, whether there was a little gas in there or not.

Q. What would a miner do if he should come across a signal of that kind, any place in the White Ash mine?

A. If it was in his own place, his own working place in the mine, he would have had his instructions from the fire boss what to do, but in any other place he would have no business to go over the dead line at all, he would not go over.

Q. What marks, if any, did you see in room No. 8 of the White Ash mine an- the 4th left entry the last time you were in there, Mr. Kilpatrick?

A. There wasn't any marks except my own at a point about in the left-hand corner of the room, and the fire boss for Sunday night; they were there on the coal.

211 Q. Who were the two men that were working in that room on Sunday night?

A. John Hawthorne and John Holiday, were the names of the men working there on Sunday night.

Q. Where are they now?

A. Hawthorne is in Madrid, Holiday, I don't know where he is.

Q. When a fire boss would make his rounds of inspection, what, if any, marks would he put at the working or in the room, whether the same was good or bad?

A. His initials and the date of the month, such as for instance, the marks on the face of the room on the morning of the explosion would be J. D., 2, 27, '95, meaning John Deighton, 2d month, 27th day, 1895.

Q. What, if in the opinion of the fire boss, the place was not safe as to fire, what sort of a mark would he put up?

A. You mean if he found a little gas in that room, or any gas in that room?

Q. Yes, sir.

A. He would go back from the face a piece, altogether probably 20, 30 or 40 feet from the face, whatever he thought was proper, and put a tie across the track or piece of plank, mark his initials, date of the month and the year, and if there was very much gas he would put XX; if there was simply a little he would put X.

212 Q. State whether or not the full intent or meaning of that signal, and the custom on the part of the fire boss, was known to the men working in the White Ash mine.

A. Yes, sir.

Q. Where were you at the time this explosion occurred?

A. At my home in bed, asleep.

Q. Who notified you of the fact of the explosion, if anybody?

A. Some of the folks around the house; Mrs. Kilpatrick notified me, I believe, that there was something wrong with the White Ash mine; waked me up.

Q. What, if anything, did you do then?

A. Put on my clothes, got out of bed, went over to the White Ash as quick as I could to see what was wrong.

Q. Well, now tell what you did when you got there?

A. When I got there there were lots of men on top, quite a crowd of men on top of the mine, and the trip standing in the mouth of the mine. I got into the trip, requested the rope-rider to go down with the trip, went as far as the fire boss' cabin, got out there of the trip and got a safety lamp in the cabin and went down to the 3d left, and tried to get into the 3d left two or three times, as the trapper boy of the 3d left had told me that the driver of the 3d left, a personal friend of mine, had just gone in a few minutes before the explosion occurred with an empty trip. I tried two or three times to get into the 3d left with my night-shift boss driver, met him around

213 there some place on the 3d left or on the slope, and some others one or two was with us, three or four; we found we could not get in, and we came out and went down to the 4th left: we called a while in the 3d left for the driver, but could get no answer, and the damp in the 3d left was very strong just immediately inside of the door. And when we got down to the 4th left on the main slope there was quite a number of men around there offering suggestions, etc., as to how to get into the 4th left entry, that the explosion had occurred in there, and I think I made the suggestion that a curtain be put across the main slope and to leave a small opening on the road, on the right-end side of the slope as you go down from this curtain to the rib, open the trap-door on the 4th left main entry, and drive the after damp ahead of us with the pure air and go right in the main entry, bratticing the cross-cuts temporarily to the mouths of their rooms as we went. The fire bosses and miners standing around there generally went and brought canvas; I assisted them, I done what I could until I got into No. 10 room, I believe, on the main entry; when the superintendent came along I told him what we were trying to do and what had been told me regard-

ing the condition of the 4th left main entry as to after damp, and the reason for this canvassing in this form and going in here, and he requested me to go back out to the parting and attend to those stoppings that had been put in temporarily, get what men I possibly could find, if not doing anything, or where there was too many at one job to place them in proper position so that all the air
214 possible could be forced in behind them and make these stoppings permanent just as near as possible, and he proceeded with the work that had been carried on where I left. I made several trips to the top with the empty trip for canvas and lumber and boards for these stoppings and material, and when the bodies commenced coming out I went out with the trip with them.

Q. What superintendent was this that you spoke of?

A. Mr. Duggan. I showed Mr. Brown the return air course of the 4th left, that is, with regards to the split in No. 6 room, and the system of bringing the air down on the entry of No. 2 room, took it up the plane through these rooms, where No. 1 room was connected with the back entry of the 3d left, went up No. 8 room with Mr. Brown as far as the back cross-cut.

Q. State whether or not after the explosion you were in No. 8 room of the 4th left.

A. Yes. I was up as far as the top cross-cut of No. 8 room.

Q. The cross-cut between rooms 8 and 9?

A. Yes, sir.

Q. What was the condition of the brattice after the explosion, in No. 8 room?

A. The brattice was all knocked down.

Q. How long after the explosion was it that you were in No. 8 room, about how long?

A. Well, I believe it would be about two or three o'clock, between 2 or 3 o'clock some time in the afternoon.

Q. Do you know whether anybody had been in there before you since the explosion?

215 A. I don't know.

Q. Who went in with you to No. 8 room?

A. Well, there was four or five in the gang. Mr. Brown, Mr. McKinley and one or two others. I don't remember who they were. I had the Davy lamp and handed it to Mr. Brown, of course, he being the older man; I had a Glinny, what is known as a Glinny; it is a working lamp, not a test lamp. Mr. Brown went ahead of us with the Davy lamp. The room was very strong with after damp, except on the 4th left main entry where we had the main current of air coming in. Wherever you went except that, the after damp was terrible strong in the mine.

Q. Did you find any bodies in room 8?

A. We got as far as a body laying in the cross-cut, but we were unable to bring it back with us. We didn't even take time to see who it was, but afterwards, when the air got around that far, and the men got around to get these bodies out, we understood that the body lying in the cross-cut was Kelly's; I never saw it afterwards

until it was brought on the parting; these bodies all passed me on the parting.

Q. Did you find any ties in room 8 when you went in there after the explosion?

A. Yes, there was a tie with a fire-mark on it, almost in front of the cross-cut, a little bit below, if anything, to my best recollection, as we went up there. There were several other ties that had been torn up, and rails, loose rails, a sledge hammer and some tools laying there in the cross-cut.

216 Q. What was this mark on the tie which you have spoken of?

A. To the best of may recollection it was "W. R.," with a day and date, but what the day and date was, I don't remember. I remember the remark being passed at the time in my own mind, that that was Ray's fire-mark, that was Ray's initials.

Court adjourned till 9 a. m., 12, 13, '97.

Court met pursuant to adjournment.

Q. Were you working in the White Ash coal mine during the months of January and February, 1895?

A. Yes, sir.

Q. I wish you would describe to the jury just what was the process by which air was carried up to the face of the entry when you were driving an entry, and when that entry was being used there as an air course, and how you performed that work, in carrying the air up to the face?

A. We put the curtain across the main entry, right on the opposite corner of the cross-cut from the back entry, across the track of the main entry, then ran brattice parallel with the track up to within 6, 7, 8 or 9 feet of the face of the main entry, wherever the miners desired it, on the upper side of the entry, the track being on the lower side of the entry, behind the canvas on the top side, or this brattice would be the return for the air from the face of the entry.

217 Q. As compared with the size of the entry on which was the track what would be the distance between the curtain and the top of the entry and from the curtain to the lower side of the entry?

A. It would be greater.

Q. How much greater would the space be, and which would be the greater?

A. The track being on the lower side of the entry and cars going in and out there you would take up from five to six feet of space, the width of the entry being 9 feet, the return air course behind this canvas would be 3 or 3½ feet wide; you had to allow with the track for the width of the cars and the swing of the cars that were passing in and out so as not to come in contact with the lower side rib or with the brattice.

Q. Do you know what the length of axle of the cars was used in the White Ash coal mine at the time of the accident?

A. Six feet, probably measured on the inside of the car; there were bumpers on the outside.

Q. That is the length of the car, is it not?

A. Yes, sir.

Q. I am speaking about the width.

A. Well the gauge of the track was 3 feet 4, but as to the actual width of the car I don't know; I never measured it, but it was a 40-inch gauge.

Q. In driving the main and back entries of the White Ash mine, state whether or not cars were used for the hauling out of the product of the entries?

A. Why, certainly.

218 Cross-examination.

By Mr. CLANCY:

Q. Mr. Kilpatrick, yesterday when you were describing the course of the air through the mine you stated that in the 4th left entry the air was conducted to the face of room 18 by a brattice at or about the time of the explosion. Now, is it not a fact, that at that time, there was no brattice in that room, and that the room was just turned and was in only a few feet?

A. I know the room was turning; as to how far it was or whether there was actual brattice in there, I don't know, I am not certain, but I know if it was up any distance there would be a brattice, as that was the custom.

Q. Then you were describing the course of the air as you thought it naturally would be and not from a recollection of what it actually was at that time?

A. No, sir.

Q. Well, then, state whether or not there was or was not a brattice in that room at that time.

A. I don't exactly recollect, because it was an unimportant place being just turning.

Q. So you are not sure whether or not you are correct in saying that it was conducted to the face of that room by a brattice at that time.

A. No, sir; I'm not certain.

Q. In the same course which you gave yesterday, a little further along, you said that the air came down room 2 of the 4th left entry to the main entry and from there went up on the plane.

219 Now, is it not a fact, that the air came down room 2 to the lower cross-cut, went through that cross-cut into room 1 and through another cross-cut from there to the plane without going to the main entry at all?

A. No, sir, not to my recollection.

Q. Then this map does not correctly represent the course of the air?

A. I don't know what the map represents. I know what my memory represents.

Q. Let me call your attention to the map and see whether it does

not refresh your memory. This blue line represents the course of the air, does it not?

A. Yes; I suppose so.

Q. Look at room 2 on the 4th left entry. The air comes down room 2, does it not, according to this map?

A. According to the map, yes.

Q. And goes into a cross-cut into room 1 and then from room 1 it went through another cross-cut into the plane?

A. Yes, sir.

Q. And according to the map it didn't go to the main entry at all?

A. According to that blue line on that map?

Q. Now after examining the map what do you say as to the course of the air there?

A. The map is a matter of hand work and an error could be made by a pencil but I do not think an error would be made here on recollection.

220 Q. Within two or three weeks before the time of the explosion, did you know of any complaint from the men working on the plane about the condition of the air?

Mr. TWITCHELL: Objected to as improper redirect.

Objection overruled. Defendant excepts on the ground of improper cross-examination and matter not brought out on the examination-in-chief.

A. No, sir.

Q. Did you at any time during the month of February, 1895, know of an opening having been made through the stoppings in the upper air course on the 4th left entry which would have the effect of increasing the supply of air to the men on the plane?

A. Yes, sir.

Q. By whom was that made?

Mr. TWITCHELL: I ask for an objection to that former question, and the answer to it on the ground that it presumes a fact not in evidence; there is no testimony here that it was for the purpose of an increase of air to the men working on the plane or any other purpose.

Objection overruled. Defendant excepts.

Q. Did you at any time during the month of February know of an opening from room 6 into the back air course of the third left being stopped so as to turn the whole current of air down towards the plane instead of letting a part of it escape through that opening?

221 Mr. TWITCHELL: Objected to for the same reason, improper cross-examination, relative to matters not brought out upon the examination-in-chief, immaterial.

A. No, sir, I never knew that that was entirely stopped at any time. One corner of the curtain was always open, a little of the canvas across the neck of that room where it went through.

Q. That opening through the stoppings in the upper air course, did that remain open up to the time of the explosion, do you know?

A. Yes, sir.

Q. In giving your description of the course of the air through the 4th left entry of the mine, did you not base your description upon the assumption that all brattices and curtains were up and in their proper places and that there was no obstruction in the air course—it was on that theory that you described the course of the air through that entry, was it not?

A. I can't see where there would be any assumption. It was something I knew about. The air continues to travel through the mine, and if the brattice is not put up or will fall down by itself, it might be by a fall of rock or something, but that would simply make a break in the air, but the air would continue to travel just the same.

Q. In order that the air should go through that entry in the manner that you described it, all the brattices and curtains must have been in place and there must have been no obstruction in the air course, is that not the fact?

A. No, sir, it is not a fact.

Q. Do you mean then that, if the brattices and curtains
222 were not in proper shape and the air course was obstructed, the air would still circle just the same?

A. If the air course was obstructed entirely, the air would be shut off on the left side entirely, but if a brattice was down in any one particular place, and air travelled through the 4th left back entry into the main entry and through this place where brattice was knocked down or fell down or came down, the air would simply be cut off at that one place where the brattice was down and would take the shortest possible route to the next place.

Q. If the air course were partially obstructed the air would be partially cut off, would it not?

A. There being no obstruction below the 4th left at all, if there was one in the 4th left back entry the full volume of air would come into the 4th left, that belonging on the left side would travel from this partial obstruction in the 4th left back entry, with a greater velocity and probably with a loss by friction against this obstruction.

Q. You think then that the particular effect of the reduction in size of the air course would be to increase the velocity of the air, and that that would be the principal effect?

A. No, sir, necessarily by an increase in the velocity the principal effect would be the loss by friction.

Q. Then the full quantity of air would not be carried through to be furnished to rooms on the 4th left if there was such an obstruction, such a partial obstruction?

A. I, as one of the foremen in charge of that mine, had a
223 theory we worked on, a practical theory well known to every miner, that this brattice in a main entry or a back entry or a room that was turned that was only entry width, there was a nar-

rower return than there was of an intake, and the consequence was, we had a loss by friction in this place, but there was always a sufficiency of air to allow for this by measurements made by the proper officials by the anemometer.

Q. Now, Mr. Kilpatrick, that is no answer to my question. I asked you if with a diminution of the size of the air course from any obstruction the same quantity of air would pass through there as through an unobstructed air course, would it or not?

A. It would.

Q. A small air course would furnish just as much air as a big one?

A. Well, just depend how big it was or how small it was.

Q. Well, take an air course that is 9 feet wide and 5½ feet high, and with a roof having a dip of about 14 degrees, with an obstruction in that air course that did not leave more than 3 inches in height on the low side, and the obstruction extending several hundred feet, would it, in that obstructive condition, carry as much air as it would if it was unobstructed?

Mr. TWITCHELL: Objected to as improper cross-examination, this witness not having testified whatever to any such state of facts.

Objection overruled. Defendant excepts.

A. You assume that there was an obstruction in this 4th
224 left air course, that is dip—I want this information so that I can answer this question.

Q. I am not talking about the 4th left air course. I am talking about any air course obstructed in that way and ask you a question based upon that supposition?

A. If any air course on the left side had a check as described by you or an obstruction, it would act as a check on the air at the split on the main slope at the bottom of the mine.

Q. Now, answer my question.

A. I am trying to.

Q. I am not talking about the 4th left air course. I am talking about any air course obstructed in that way and ask you a question based upon that supposition.

The COURT: You can answer that yes or no, if you can. Then you can make any explanation pertinent to the answer and the question that you may see fit.

A. I can't answer yes or no; never have made any measurement on matters of this kind with an anemometer.

Q. Then you don't know whether it would or not?

A. I don't know except from practical tests with a naked light.

Q. Did you ever make a practical test with a naked lamp of the amount of air going through an air course obstructed as I have described?

Mr. TWITCHELL: Objected to as immaterial, for this reason: It is improper cross-examination in the first place, he not having testi-
225 fied that he ever did make an examination with reference to any such air course; there is no testimony before the jury that

there was any such air course in the mine obstructed as described by counsel, and for the further reason that it is calling for an opinion of this witness upon a state of facts which do not exist and of which there is no proof.

Objection overruled. Defendant excepts.

A. No, sir.

Q. Then you don't know whether it would or would not carry an equal quantity of air with an unobstructed air course?

A. I know from tests made with a lamp upon a brattice curtain in entries, that air travels with a greater velocity in narrow places.

Q. Now you answer my question.

A. I know from theory; from reading.

Q. Do you or not know that?

A. I have told you what I know. Repeat the question.

The COURT: Answer the question if you can, and if you can't, say so.

Mr. FIELD: He understands it perfectly.

The WITNESS: To suit myself probably, not to suit Mr. Field.

Q. Then you don't know whether it would or would not carry an equal quantity of air with an unobstructed air course?

A. It would conduct with greater velocity according to the reduction lost by friction.

Q. Then there would be some loss?

226 A. There would be some loss, according to all of my reading, and according to all of my study.

Q. Then it would not furnish an equal supply of air as an unobstructed air course, would it?

A. No, sir.

Q. Because there would be a loss by friction?

A. Yes, sir.

Q. In making your runs through the mine, as you described yesterday, did you always take the same course as the one you have described?

A. No, sir.

Q. That description was based upon what was your usual and customary course, however, wasn't it?

A. Yes, sir.

Q. At these visits, you would not undertake to describe any particular course that you took on any particular night?

A. No, sir.

Q. During the time that you were foreman, did you ever go through the 4th back entry in making your inspection of the mine?

A. Not through the entire 4th left back entry.

Q. Why didn't you go through that?

A. There had always been some water laying in a portion of that back entry, and it would be uncomfortable to travel through there and get your feet wet, and I avoided that portion of that back entry by going around it.

Q. Where did that water come from?

Mr. TWITCHELL: Objected to as improper cross-examination, nothing of that kind being brought out in the examination-in-chief with reference to the source of any water in that 4th left back entry.

227 Objection overruled. Defendant excepts.

A. From the workings above the 4th left back entry, working places, rooms, etc. That was a lower point than what these working places were.

Q. And it was therefore the natural place to which the water would run?

A. Yes.

Mr. TWITCHELL: Objected to as leading. Object to leading the witness in cross-examination in such way as that.

Q. Could any of that water have come from any of the workings above the 4th left?

A. Well, it could have soaked through the bottom underneath the coal, water coming down from the 3d left would lay in the back entry of the 3d left.

Q. What I wanted to know is whether there was any passageway by which water would naturally drain down from the 3d left into the 4th left?

A. No, sir, not any passageway.

Q. Nothing except what you have mentioned?

A. Not to my knowledge.

Q. That is by percolation as you have described?

A. Yes, sir.

Q. Was there any means provided for removing that water from the 4th left air course prior to the explosion?

Mr. TWITCHELL: Object to that question as improper cross-examination, nothing have been gone into with reference to the means of removing water from any part of the mine with this witness.

228 Objection sustained. Plaintiff excepts.

Mr. FIELD: We offer to prove by the witness that there was a means provided for removing that water, artificial means and that for a considerable time prior to the explosion it was not kept in operation or employed for that purpose.

Offer overruled. Plaintiff excepts.

Q. At the place indicated on the map by an X mark, at the point where room 1 of the 5th left was driven through into the 4th left air course, when you tested the air there with your lamp, did you make that test below the point where the air turned around into the air course or above?

A. I would always try it first in the back entry inside of the neck of room 1, back entry of the 4th left, where the neck was driven through on to the 4th left, and then on the outside of room 1 on the back entry out towards the slope as there was some air coming that

way, also through some places on the plane, then what was coming up room 1 inside of this neck, coming down in the neck.

Q. You would try it in three places?

A. Yes, the action of the flame would give me the information I wanted.

Q. When you were in room 8 on Sunday night who was working there, who were the men working there?

A. To the best of my recollection John Hawthorne and John Holiday.

Q. Do you know where they are now, these men?

229 A. Hawthorne is in Madrid working there, Holiday, I don't know where he is.

Q. Was that room finished Sunday night?

A. I don't know whether they finished it or not. I gave them orders to square the place up on that night, that is square the face right up, not to leave any butts standing out, to shoot these butts off.

Q. Did you find any gas there that Sunday night?

A. Yes, sir.

Q. How much?

A. On the seam on the top side of the room I filled a Davy lamp. The men were working there with naked lights.

Q. Didn't you find enough so that it entirely filled the lamp and exploded in the lamp as it will when it fills the lamp?

A. Yes, it cracked in the lamp. A small quantity of gas will do that if you hold it long enough.

Q. How long did you hold it in the gas at that time?

A. Until it cracked, then I took the lamp out of it. If it would simply make a cap on the blaze in the safety lamp then I knew that it was not going to fill, but if the gas in the lamp would blaze all through the gauze I would know that it was going to crack.

Q. Well, as soon as you put the lamp in the gas did it immediately begin to blaze all through the gauze as you say?

230 A. Well, I didn't hold it close to the roof very long until the lamp was filled and in drawing it down it cracked, of course.

Q. Wasn't it enough of an explosion to cause you considerable alarm at the time?

A. Why, no; a bit of gas cracking in a safety lamp would not cause me any alarm at any time since I was a boy.

Q. Did you go any further with your examination for the gas at that time?

A. No, sir.

Q. You made no mark—was the fire boss with you at that time?

A. Not that I remember of. There was no one with me except these miners and they were working and I took their safety lamp and went over to the corners to see what it was like and gave them these orders that I have described.

Q. That was not a sufficient amount of gas then to have the place fire-marked to keep men out?

A. No, sir, not in my own opinion, it would not be.

Q. How near to the face of the room was the brattice in room 8 at that time.

A. Well, anywhere from 10 to 15 feet, it ran up.

Q. Did you ever go into room 8 again after that Sunday night before that explosion?

A. No, sir.

Q. Did any fire boss report to you that there was gas there after that?

A. I don't remember that they ever did.

Q. You were the night pit boss, I believe?

231 A. Yes, sir.

Q. Who was the day foreman?

A. John Donohue.

Q. Was your position subordinate to his, or equal?

A. Subordinate to him.

Q. I understand that he was your superior officer, Donohue?

A. Yes, sir.

Q. Referring to the firing time of shots in the mine, did you ever know while you were there of shots being fired at a regular time, except in the 6th left, as you have described?

A. I met smoke once or twice, but I never could locate the shots in traveling around the mine. It might have come from the 6th, or some miner might have fired it in his place; some of them. I never knew of shots fired at irregular times.

Q. Didn't the miners in that mine have boxes in which they were required to keep their powder?

A. Yes, sir.

Q. And when a man on one shift went away and left any of their powder there, they left it in the box, didn't they?

A. Yes, sir.

Q. Now, if flame should get at powder on the inside of a keg, as you were asked on your direct examination, and caused an explosion which would rent the keg asunder, that would make a loud noise, report, would it not?

A. Well, the assumption would be that it would.

232 Q. Well, don't you know whether it would or not?

A. I have never been in the vicinity of a powder keg when it exploded.

Q. Don't you know from your experience as a miner that powder confined in any way when exploded will make a noise?

A. Yes, sir.

Q. Well, from that experience don't you know that powder confined in a keg would certainly make a noise when exploded?

A. Certainly it would make a noise.

Q. On your direct examination you testified with regard to the fire-marks made by the fire bosses, that they would put one cross if there was a small amount of gas and two or more if there was a dangerous body of gas?

A. Yes.

Q. Then there were in that mine dangerous places where there might be danger from gas; is that so?

A. At intervals the fire boss would find it necessary to put a double cross on a tie or something to hold men until he would come, such as when they were driving cross-cuts from one room to another. Sometimes at intervals he made one mark in a place when the place was merely generating gas. Miners understood these marks for them not to light that gas. Two crosses meant "Wait until I come; don't cross that line until I come" unless he gave them orders different when they passed him.

233 Q. Then a double cross was a warning to men not to go over the mark unless they afterward received permission or orders to do so?

Mr. TWITCHELL: Objected to; he has not so testified.

A. Orders or instructions from the fire boss to these miners.

Q. Well, might not a man properly cross such a mark in obedience to orders from a foreman or pit boss?

Mr. TWITCHELL: Objected to as improper cross-examination, if the court please.

The COURT: If the witness knows he can answer.

A. I never sent any one over a fire-mark with any orders as a foreman.

Q. Well, might not a man properly cross such a mark in obedience to orders from a foreman or pit boss?

A. No, sir; the miner would have to have an understanding with the fire boss, that is all.

Q. Would you say then, that a man employed by that company, that it was the duty of any man employed by that company, to disobey the orders of the foreman if he told him to go over such a mark?

A. Yes, I would say so.

Q. Then the fire boss is a superior officer to the pit boss, is he? And a man must choose to obey the fire boss rather than obey the pit boss?

A. As far as regards danger marks.

Q. Did you ever know of any man that disobeyed any orders of the pit boss who was not promptly discharged?

234 Mr. TWITCHELL: Objected to as improper cross-examination.

Objection overruled. Defendant excepts.

A. Yes, I knew of men disobeying orders of the pit boss and not getting discharged on this proposition.

Q. Then you have known pit bosses to order men to go over fire-marks?

A. Well, they were not orders; they were probably requests, that came under my notice at the time, and the question would be discussed, and the fact would come out that there was a fire-mark there, and the foreman would say, "Well if there is a fire-mark, don't go;" I myself as pit boss, have done so.

Q. They were not orders, then?

A. They were consultations between the boss and the miners, discussing as to work to be done.

Q. Then we will come back to the other question; have you ever known of men in that mine who refused to obey an order of the pit boss, who was not promptly discharged?

Mr. TWITCHELL: Objected to on the ground that it does not specify as to what kind of orders they were, and a conclusion may be drawn from a general question of this kind of a regular and general disobedience of orders. It is improper cross-examination.

Objection overruled. Defendant excepts.

235 A. Discharges were of rare occurrence. I never knew of any man being discharged while I was foreman.

Q. Did you ever know of any man refusing to obey the orders of the pit boss?

A. No, a man generally done as I asked him to. I never ordered, I simply requested as a foreman.

Q. On your direct examination you said that when you were in room 8 on Sunday night there were marks on the coal, one of which you had made, and one of which was made by the fire boss; which fire boss was it that left his mark there, that you saw Sunday night before the explosion?

A. Well, I believe both fire bosses' marks were along the top side rib where they had been made, that is where I made my mark. These marks had not been shot off.

Q. The marks then were not on the face or on the side of the room?

A. On the top side of the rib, wherever they could find a smooth place that would take the chalk.

Q. What was the date of your mark that you had put in there?

A. Well, Saturday night the 20th something, first or second, whatever date that was; it was Saturday after seven o'clock, between 7 and 9, or 10 o'clock, somewhere along there.

Q. Did you say that the men were all out of the mine that Saturday night when you were making that round?

236 A. There were no miners working there that night.

Q. Are you sure they were not working that Saturday night before the explosion?

A. Yes, sir.

Q. Are you, may you not have in mind the fact that they usually did not work Saturday night? And from that general regulation, have the impression that they were not working that particular Saturday night?

A. No, sir.

Q. As to this you have a distinct recollection?

A. Yes, sir.

Q. Was it not a part of your duty to keep yourself informed as to the condition of room 8 and of the air in that room between Sunday night and the time of the explosion?

A. Sunday night was the last night that that room worked. I have never anything further to do with it unless I got some special

orders from Donohue regarding such rooms as were finished. When that room was finished 12 was my first room in that entry.

Q. When you went into the mine after the explosion how long did it take you to get in as far as room 10 as you testified yesterday?

A. Well, something like 2 hours, I believe, between 2 and 3 hours to get in there. We were working carefully as we went along, so that life was safe ahead of us. That was the main object, not to lose any more men.

Q. The reason I asked you that, Mr. Kilpatrick, was be-
237 cause the way you stated it, you could not tell whether it was five minutes?

A. It took time to get in there.

Q. In taking the air into the 4th entry after the explosion you were compelled to brattice both sides of the entry, the cross-cuts on the right-hand side and the openings into the rooms on the other side, were you not?

A. Yes, sir.

Q. If you could have taken the air in through the back entry or air course you would have had only one side to brattice?

A. If the air had been taken in the back entry?

Q. I was thinking you could have taken it in the back entry——

A. Then we would have had a mix-up.

Q. If you could have taken it in on its regular course you would have been compelled to brattice only the cross cuts and on one side of that entry.

A. Yes, into the face of the back entry, that is all we were able to do.

Q. My question was very simple. Didn't Mr. Brown who took charge of that work attempt to bring the air up from the 5th left and take it into the back entry?

A. I don't know. I didn't see Mr. Brown until I met him along the main entry of the 4th left some place. Along about the 5th or 6th, some place; I didn't know where he had been or where he came from or anything else.

Q. When you went up into room 8 did you find the bodies of Flick and Kelly?

238 A. I saw the body of Kelly laying in the cross-cut. Flick I did not see; I could not stand it to go far enough to see.

Q. There was a good deal of after damp in the room and that was the reason you could not go further?

A. Yes, sir.

Q. Did that after damp extend down below the cross-cut where you found Kelly's body when you went in there?

A. Yes, it was right from the main entry from where we had canvassed the mouth of the room. It extended down to the mouth of the room. It was on the main entry that we had to drive it; it was all through the entry right to the trap-door.

Q. Did you see any other body there besides that of Kelly?

A. No, sir.

Q. When you went into the room you went from the neck of the room on the main entry up through the room, didn't you?

A. Yes, straight up off the main entry.

Q. Did you or not go within the cross-cut at all?

A. No, sir, that was the strongest point for the after damp. The after damp going with the air through that cross-cut.

Q. Did you find the body of Donohue?

A. I didn't find any body at all; I wasn't inside at the body; Kelly's body was the only one I saw as he had met his death; I was probably four or five feet from him, and went close and looked and said, "That's Kelly," and went back.

Q. You say he was in the cross-cut?

239 A. Laying in the mouth of the cross-cut off No. 8 room.

Q. Was he entirely within the cross-cut or partly in and partly out?

A. His feet was towards the room and they were just outside the rib, that is, probably six or eight inches outside. His body was laying all doubled up on the lower side of the cross-cut. I looked sideways at him to see who he was, that is the side of the face didn't strike me plain. He was lying as though he had fallen into the cross-cut from the room.

Q. Now, I think you said that you did see bodies as they were brought out at the parting or somewhere outside?

A. Yes, sir.

Q. Do you remember seeing Flick's body?

A. Yes, sir.

Q. Did you examine it to notice what its condition was?

A. I didn't notice any of them, just lifted the blankets off them to look and see who they were as they were carrying them from the cars that the driver brought them out in to the trap on the main slope. *They* were always three or four men there, and we would probably look and say, "Who is this?" There were probably a good many more there who had been working going in and out. The doctor was right there at that point.

Q. What doctor was that, the doctor employed by the company?

A. Dr. Donaldson. A dentist of Cerrillos was also there,

240 Dentist McKellar. When a man came out, what we called "knocked out," light-headed from after damp, these two gave him medicine to bring him around again.

Q. Were Flick and Kelly what are known as company men or contract men?

A. They were company men, men who worked by the day.

Q. That is the difference between the two. Company men are paid by the day and the others are paid by the amount of work they do?

A. Yes, and the others are paid by the amount of coal they dig, so much per ton.

Q. Well, some contract men are paid on some circumstances by the yard, are they not?

A. Yes, sir; there was yardage and tonnage also.

Mr. TWITCHELL: Objected to as improper cross-examination.

Objection sustained. Plaintiff excepts.

Q. Under whose immediate direction were Flick and Kelly employed?

A. Under Donohue's, in the daytime.

Q. Did you see whether or not Flick's body was burned, when you took the blanket up and looked at him to see who it was?

A. I don't remember that I did.

Q. Do you remember seeing Donohue's body when it was brought out?

A. Yes, sir.

241 Q. Do you remember from what you saw whether or not he appeared to be badly burned or not?

A. Yes, he seemed to — badly burned on the face, and as if he had been in considerable dust or some substance that had gone into the skin; he was black.

Q. You looked only at his face to see who it was?

A. Yes, took off the blanket and looked at him there. There were quite a number around him and it was quite a while before we could identify who it was, he was so black.

Redirect examination.

By Mr. TWITCHELL:

Q. In your cross-examination, Mr. Kilpatrick, you spoke about an opening supplying air to the plane-rooms. I will ask you to state whether or not that opening in any way interfered with the circulation and conduct of the air up to the face of the 4th left entry, and the rooms turned off of that entry.

A. No, sir.

Q. I will ask you to state whether or not at all times during the times that you were acting as night pit boss and at every time that you made an inspection for air there was a sufficient quantity of air passing around the face of the 4th left main entry and all of the rooms turned off of that entry through which the air passed.

Mr. FIELD: We object to the question as not proper redirect examination, being a matter that was gone over in the direct examination, simply reiteration.

242 Objection overruled. Plaintiff excepts.

Mr. FIELD: Objected to on the further ground that it calls for a conclusion and opinion of the witness.

A. Yes, sir.

Q. What was a sufficient quantity of air, if you know, at the face of the 4th left and through the rooms turned off of the 4th left?

Mr. FIELD: Objected to because it is not redirect examination.

Objection overruled. Plaintiff excepts.

A. My understanding from measurements made by——

Q. I am not talking about tests you made with your light.

A. It would be very noticeable on the blaze of my light on the 4th left cross-cut from the back entry to the main entry and I could not carry a light coming from the 4th left main entry behind the

brattice curtain on its return, I would not attempt to carry a light. I would go to the end and try it and it would show strong on this light at the cross-cut; then in the rooms it was not quite so strong on the blaze of light.

Q. Why would you not attempt to carry a light there, Mr. Kilpatrick, in that place you spoke about?

Mr. FIELD: Objected to as improper redirect examination and cross-examination of his own witness.

243 Objection overruled. Plaintiff excepts.

A. In that narrow place, the blaze would blow all over the lamp down the spout and probably burn my fingers. I would not go in there with a naked light in my hand. I would put it in my cap and walk through there. That is the kind of air that is passing through there.

Q. Do you mean that the velocity is greater?

A. The velocity of the air is much greater in there, yes.

Q. Now, you spoke of a loss by friction to a hypothetical question given you by Mr. Clancy, in making your inspections as to the air, and the manner which you did it. If there had been any material loss of air at any place in that mine could you have noticed it with your naked lamp?

A. No, sir; a naked light would not show; it would simply show you what your air current was, whether it was good or bad; it would not show you a material loss. The only way this loss can be shown is by the anemometor.

Q. And when you made these three tests at the back entry in the 4th left and at a place in room 1 of the 5th, state whether or not that test was satisfactory to you?

A. Yes, sir, it was satisfactory to me.

Q. State whether or not the course of the air at that time was in the direction of the face of the 4th left entry?

A. Yes, sir.

244 Q. I will ask you to point out on this map approximately the place where you made these tests?

A. At the point in the 4th left back entry.

Q. To this side of that cross-cut?

A. This cross-cut had a stopping in it; that didn't cut any figure. Out here marked "B" test of the air indication, marked A towards the main slope; then I took it in here near the neck of room 1 also. This would be the strongest point, the point "A" in the 4th left back entry.

Q. Mr. Clancy asked you some question about the gas in room No. 8 on Sunday night. I will ask you whether or not at the time you were there and detected this gas in your lamp the man Hawthorne and the man Holiday were working up against the face of the room?

A. Yes, they were working up against the face. What they were doing I don't remember; I know they didn't stop, they kept on working; they didn't sit down. I just simply gave them orders, went to the corner of the room and from that out.

Q. Were they working with naked lights, or how?

A. Yes, but where they had them I don't know, whether they had them in their hats or not. I know their safety lamp was hanging on a prop and I took it off the prop.

Q. How long had these men known that that room made gas, if you know of your own knowledge?

A. Well, I don't know; I don't just remember when they went in that room; I know that is where I found that that Sunday
245 night on change of shift. They came to me from a day shift before that.

Q. I will ask you whether or not at the time that you found this gas in the top corner, as to the condition of the air current passing around the face of that room, was it good or bad?

A. The air current was good at the corner of the canvas.

Q. What was it doing to this gas which was being generated there?

A. Carrying it off.

Q. I will ask you when you left room 8 on Sunday night, did you leave these men working there when you left.

A. Yes.

Q. I will ask you whether or not you left that room on a safe condition when you left there.

Objected to as leading. Objection withdrawn.

A. Yes.

Q. Now then, Mr. Clancy asked you in cross-examination what the possibility of accidents in dangerous places was in that entry and where gas was apt to be generated. I will now ask you whether or not the fact that there were apt to be dangerous places and places where gas was generated, was or was not well known to every person working in the mine on the 27th day of February, 1895, and for a month prior thereto?

A. Yes.

Q. Now, Mr. Kilpatrick, did you ever order a man over a danger signal in the White Ash mine without ascertaining whether or not it was safe to proceed in that direction?

246 A. No, sir.

Q. Did you ever hear of anybody being ordered over a danger signal until it had been ascertained that the place was safe?

A. No, sir.

Q. In your entire experience as a miner and as a pit foreman in every capacity you have ever worked in in the coal mines, did you ever hear of a man in an official capacity in a gas-y coal mine ordering anybody to go over a danger signal of the kind that was placed in room 8, or until it had been first ascertained that the place was safe?

A. No, sir.

Recross-examination.

By Mr. CLANCY:

Q. Mr. Kilpatrick, how long had you known that room 8 made gas, prior to that Sunday night, of course?

A. That entire entry?

Q. I am asking you about that room.

A. That room was known as one of our gasiest rooms. Every alternate room made gas, and 8 was one. It had been making it from a little piece above the cross-cut where we commenced to find it.

Q. From a little above the last cross-cut?

A. Yes, sir; it was about there when I started as night foreman in the White Ash mine, the room was about there some place, about that cross-cut to the best of my recollection.

Q. And so the men at work there had a safety lamp that night?

247 A. Yes, sir.

Q. Did you give them that safety lamp or had they got it presumably from the fire boss?

A. I didn't give it to them, they got it from the fire boss, that would be the natural way for them to get it.

Witness excused.

JOHN DEIGHTON called and sworn as a witness for the defendant testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age and business to the jury, Mr. Deighton.

A. John Deighton, age 33, fire boss.

Q. What was your business on the 27th day of February, 1895?

A. Fire boss.

Q. What had been your business during the months of January and February of that year?

A. Fire boss.

Q. Where were you fire boss?

A. At the White Ash mine.

Q. Were you day fire boss or night fire boss?

A. I was both.

Q. On the 27th day of February were you day or night fire boss?

A. Day fire boss.

Q. Do you know of anything particular having occurred at the White Ash mine on the 27th day of February, 1895?

A. Yes, sir, an explosion.

Q. What time did you go to work in your capacity as fire boss on the morning of the 27th day of February, 1895?

A. Somewhere about 3 o'clock.

248 Q. Now, state what you did, Mr. Deighton, in your capacity as fire boss on that morning, as you remember it now.

A. I examined all the working places before the miners went in.

Q. When you say "before the miners went in," state whether or not you mean the miners who were working in the 4th left entry of that mine, on the day of that explosion.

A. Yes, sir.

Q. Do you remember now, the various places where you went in your inspecting tour on that morning?

A. In the 4th left, in the main and in the 4th left as well. I went into them all that was working on the 4th left.

Q. Well, what did you do when you entered all the working places on the 4th left?

A. Examined them and looked for accumulations of gas.

Q. State whether or not you marked any place in the 4th left in your capacity as fire boss on that morning.

A. I don't remember.

Q. Do you know where room 8 is of the 4th left?

A. Yes, sir.

Q. When were you last in room 8, and what did you do there before the explosion?

A. Monday morning. I examined it, found gas, put a mark up there.

Q. What kind of mark did you put, and where did you put it?

249 A. I put a danger mark above the last cross-cut.

Q. What kind of danger mark was that?

A. It was a tie.

Q. What, if anything, did you put on the tie?

A. Initials, fire, danger.

Q. Any crosses on that tie?

A. Yes, sir.

Q. How many crosses did you put on the tie?

A. I don't remember now how many crosses there were.

Q. Did you notice the air current at the time you were in room 8?

A. No, sir; I don't remember.

Q. How far up in room 8 did you go?

A. Pretty near to the face.

Q. What was the condition of the brattice in that room at that time on Monday morning when you were there?

A. Good.

Q. Were you up at the face of the 4th left entry on that morning?

A. Yes, sir.

Q. Were you in room 17, 16, 15, 14, 13 and 12 on the morning of the explosion, that you made your inspection?

A. Yes, sir.

Q. And in room 12, 11 and 10?

A. I don't remember whether I was in them or not; no I don't think I was.

Q. I will ask you what was the condition of the brattice in these rooms, if you remember, in the rooms that you were in?

250 A. Good, as far as I can remember now.

Q. Were you at the last cross-cut between the back entry and the main entry of the 4th left?

A. Yes, sir.

Q. How was the air conducted from that last cross-cut up to a point close to the face of the 4th left main entry?

A. By canvas brattice.

Q. What was the condition of that canvas brattice at the time you were there on that morning, as to being good or bad?

A. I don't remember—there is room from at 185—I think that the canvas was a little down from the roof, that is all.

Q. I asked with reference to the canvas going up the entry to the face of the entry, was that canvas in good or bad condition?

A. It was in good condition.

Q. About what time in the morning, Mr. Deighton, was it that you were in the rooms of the 4th left? The morning prior to the explosion on the date of your last inspection.

A. Well, it was about half past five.

Q. I will ask you whether or not there was any fire-damp in that entry that morning or in the rooms on that entry?

A. There was so, a little in two rooms there, but I forget which of them it was now.

Q. Will you state whether or not you made an inspection, if you remember whether or not you made an inspection after the fire?

A. I usually stopped at Maley's place—I can't remember.

251 Q. I will ask you to state whether or not you were on the plane of the 4th left entry on the morning prior to the explosion when you made your usual inspection?

A. Yes, sir.

Q. Can you state what the condition of the air was on the plane at the time you were there that morning as to being good or bad?

A. It was fairly good.

Q. Were you at the foot of the main slope at that time?

A. Yes, sir.

Q. Do you know what was the condition of the air there at the time you were there?

A. It was good.

Q. How long, Mr. Deighton, have you been a coal-miner?

A. 23 years.

Q. Where have you worked?

A. I started in England in Haswell colliery, Eldon, Morton, Ludworth, and Illinois, Pennsylvania, Colorado, and here.

Q. In whose employ are you now, Mr. Deighton?

A. The Victor Coal Company.

Q. Where is that?

A. Las Animas, Colorado.

Q. How long have you been working there?

A. Since last June.

Q. You are not in the employ of the Cerrillos Coal Railroad Co., now?

A. No, sir.

252 Q. What did you do after you had made an examination of the White Ash mine on the morning of the accident?

A. Came to the lamp-house.

Q. Where is the lamp-house in the White Ash coal mine, or where was it at that time?

A. It was on the left side above the second right.

Q. Well, when you got there what did you do?

A. I don't remember now whether we cleaned lamps that time or not.

Q. Did the miners come into the mine when you got there or did they come in after you got there?

A. They came after I came.

Q. What, if anything, was it your duty to say or do in your performance of your business as a fire boss to miners coming into the mine after you had gone to the lamp station subsequent to the inspection of the property?

A. They asked me how their places was and I told them the condition of it.

Q. Every miner coming into the mine would ask that question and you would state it to them?

A. Yes, sir.

Q. Do you remember the miners coming into the mine on that morning?

A. Yes, sir.

Q. Can you state, Mr. Deighton, how many times during your occupancy of the position of fire boss you had occasion to put up danger signals in the rooms on the 4th left entry?

A. No, sir.

253 Q. Can you state approximately how many times, you had occasion to put up danger signals on the 4th left entry?

A. I judge on the average of about three or two.

Q. Do you mean two or three at every inspection?

A. Yes, sir.

Q. Now, what was the character of these danger signals which you were accustomed to put up? Describe them to the jury thoroughly?

A. I put a tie down on the track and put my initials and Fire, Danger, and an X.

Q. What was the object in putting the tie down on the track?

A. To let the miners know there was gas there.

Q. How long, Mr. Deighton, had you worked in gas-y mines?

A. I worked seven years in the old country, and I judge six in Las Animas county, Colorado, that is prior to the explosion here.

Q. As compared with the White Ash mine were the mines in which you had worked which were gas-y more or less gaseous than the White Ash mine?

A. There was three with more gas.

Q. Where were they?

A. Haswell, Morton and Ludworth in England.

Q. Did you know Mr. Deserant and his two sons?

A. Yes, sir.

254 Q. State whether or not you ever had occasion to put up danger signals in any room in which they were working?

A. Yes, sir.

Q. Where was that and when?

A. 17 room, I think it is.

Q. And when?

A. I remember the week.

Q. Tell the jury what you did when you put up this danger signal and where it was and all about it with reference to Mr. Deserant and his two boys.

A. I put curtain up on the entry and drove the air up in their place.

Q. What was that for?

A. To drive the air up into their room.

Q. How did it become necessary to drive the air up into their place?

A. There was a little gas in there.

Q. I will ask you, Mr. Deighton, whether or not, of your own knowledge the Messrs. Deserant were familiar with the signals and marks used by you and the other fire boss to indicate danger or the presence of gas?

A. Well, I think *he* was.

Q. Now, we will return to the miners going to work in the mine in the morning. When you told the miners that their places were unsafe and were marked what would you do so far as their work was concerned?

A. I would give them a lamp and tell them just the condition of their places.

255 Q. What kind of a lamp would you give them?

A. A Glenny lamp, safety or a Davy.

Q. Well, supposing that you had ascertained in your inspection that a place was making gas and was in your opinion a dangerous place, what then would you say to the miners whose work was in that particular locality?

A. I would tell him to get it out; how to brush it out.

Q. Would you ever render them any assistance yourself?

A. Yes, sir, sometimes.

Q. What was you- business, Mr. Deighton, with reference to the curtains and brattices?

A. It was my business to put them up.

Q. I will ask you whether or not in the performance of your duties as fire boss of the White Ash mine you did or did not perform that duty as you were called upon to perform it?

A. I did.

Q. Now, I wish you would describe to this jury, and I do this because I want the jury to understand it thoroughly, with the use of this lamp here, just how you would detect the presence of gas in a room?

A. When I went into a room I would go to the high side of the room. This here (referring to Davy safety lamp introduced in evidence) is a lock to lock it with. They carried the light about this

high. When I went into a room I always went to the high side or to the highest place in the room and raised it up and if there
256 was gas there it would draw the light, and then I would put it out and see where the edge of the gas was.

Q. Well, what would be the result if you found any gas so far as the lamp was concerned?

A. I put the danger signal up there.

Q. Well, if you were to find gas in a room would you also put—state whether or not you would also put a danger signal on the coal where the men would be apt to find it.

A. I would put the date up there very often while I was trying gas, I would be putting the date on the coal.

Q. Supposing, Mr. Deighton, that you would discover gas in a room or in a place where there was no railroad track or any ties or anything of that kind upon which to make the marks which you said you made, how would you indicate the presence of gas if you found it, so that the miners would know where it was?

A. Put the danger signal up just the same.

Q. Put it where?

—. ——.

Q. Put it at the last cross-cut on the coal?

A. No, sir, on a tie.

Q. You don't understand me. Supposing that there was no tie there to use for the purpose of putting the danger signal on, then where would you put?

A. I would have to get something to put it on there.

Q. Would you do that?

A. Yes, sir.

Q. Where were you at the time the explosion occurred, Mr. Deighton?

257 A. In the second left.

Q. What were you doing there?

A. Putting up a curtain.

Q. After you were in the rooms on the 4th left on the morning of the explosion, state whether or not you were up at the face of the 3d left?

A. Yes, sir.

Q. What was the condition of the brattice and curtains in the rooms of the 3d left and up at the face of the 3d left?

A. I don't remember now.

Q. Were you in the 5th left on the morning of the explosion?

A. Yes, sir.

Q. Was there any brattice or curtains there?

A. I think there was in the entry.

Q. Do you remember what their condition was?

A. It was good there.

Q. Did you know John Donohue?

A. Yes, sir.

Q. How long had you known Mr. Donohue?

A. 20 years.

Q. Where had you known him?

A. I knew him in Las Animas county, here, and in England.

Q. Had you ever worked with him before working with him down in the White Ash?

A. Yes, sir.

Q. What was his position in the White Ash mine, at the time of the explosion?

A. Mine foreman.

258 Q. Had you ever worked with Mr. Donohue in England?

A. No, I never worked right with him, but I worked right close to him in the same mine.

Q. Well, from what you knew of Mr. Donohue, are you able to state whether he was a careful and competent man for the position which he held?

A. Well, I think he was.

Q. Who were the judges of how coal should be mined in the White Ash mine?

A. The miners themselves, I think.

Q. Who were the judges of how holes should be drilled and tamped and the amount of powder used?

A. The miners.

Q. Can you tell how much powder men working in the 4th left would have at any one time at any one place?

A. No, sir, I don't remember.

Q. About how much powder would two men working in a room, have on hand at any one time?

A. Well, they bought it between them, would bring in a keg when one was finished.

Q. Now, after the explosion was over, who notified you of the fact that there was an explosion when you were up on the second left?

A. The force of the wind.

Q. What did you do when you ascertained that there had been something unusual happening in the mine from the force of the wind?

A. Went down the slope.

Q. What did you do when you got down the slope?

259 A. Well, I went into the 4th left parting, I seen some men going in there, two or three, I seen the trapper was laying on one man's arm.

Q. Was that door at the parting when you got there open or closed, if you remember?

A. I don't remember now.

Q. Well, what was done there and who was doing it?

A. Well, I went down below to the 5th left, and I went up to the lamp-house and got some lamps and then went down to the 5th left, opened the door in the 5th left to try and get air up there to get up the back air course to get in there.

Q. Well, what did you do then?

A. We could not get it in there for the damp. We came back then and started into the 4th left, put a brattice across the main slope and put curtains across the mouth of every room and took fresh air in that way.

Q. Who did that—who was with you?

A. Why, there was Brown, Ray, Kilpatrick, and several others that I—Mr. Duggan I think, too.

Q. Did you notice the condition of the stoppings between the main and back entries of the 4th left after the explosion?

A. Yes, they were blown out.

Q. Where were they blown to?

A. They were scattered all around there.

Q. Now, in carrying the air into the 4th left main entry, which you are now describing, did you put up as you went in there just canvas across these cross-cuts? Did you put any board stoppings?

260 A. We didn't put any canvas up in the cross-cuts, no, sir, it wasn't necessary.

Q. Where did you put up the canvas?

A. On the mouth of every room.

Q. Then you just stretched canvas on the top side of the main entry, did you?

A. Yes, sir.

Court adjourned till 2 p. m.

Court met pursuant to adjournment.

Q. The last time you were in room 8 was what day?

A. The 25th, Monday morning.

Q. How does it happen that you didn't go back there again between then and the time of the explosion?

A. Well, I considered it an abandoned room and had the necessary mark up there.

Q. Now, I will ask you, Mr. Deighton, what was the general condition of the White Ash mine on the morning before the explosion after you had completed your inspection, as to ventilation, the condition of the brattice, the general condition of the property, was it good or bad?

A. Good.

Q. Now, after the explosion was over—this morning you were testifying with reference to the carrying of the air into the 4th left main entry and of curtaining all the necks of the rooms on the top sides of the entry—when you went down there first, did you notice the door at the parting in the 4th left?

A. That door was closed.

261 Q. What was the condition on the inside of the door?

A. Why the room on each side was filled up with dirt.

Q. Were there any evidences of explosion or concussion at that place?

A. Yes, sir.

Q. Tell the jury what they were.

A. Well, there was a car off the track in the first place and the trapper boy lay in there just about dead, and on each side of the door was filled up with dirt.

Q. What kind of dirt?

A. Dust, principally.
Q. Coal dust?
A. I didn't examine so much as that to find out if it was coal dust.
Q. Well, about what quantity of this stuff was thrown up against these sides of the door?
A. Well, I judge three feet on each side, 2½ feet or something around there.
Q. Was that body of the boy on the inside of the door towards the face of the entry or on the outside of the door?
A. On the outside of the door.
Q. Where was this car; on the outside of the door?
A. Yes, sir.
Q. Now, go on and tell the jury, Mr. Deighton, just exactly what you did in the 4th left entry and the rooms turned off of it after the explosion, as you succeeded in forcing the air up to the face of the entry?
262 A. Why we didn't force it up to the face of the entry, Mr. Twitchell, right then.
Q. Tell just what you did.
A. We opened the door and went in and put curtains at the mouth of every room there, but in the first place we put a curtain across the slope and then went into about 10 room, I think it was, put a curtain across there and went through a cross-cut on to the back entry, and then put curtains on the cross-cuts between the two entries, and then went through a cross-cut through on to the main entry, and there we found a body.
Q. Whose body was it?
A. I think it was White's.
Q. Did you notice whether that body was burned or not?
A. No, sir.
Q. Well, then what did you do?
A. Why, I came out and sat on the back entry then, and Mr. Ray and some others went in there for another body.
Q. Do you know whose body that was?
A. No, sir. And then after they came out I went in again and found another body.
Q. Whose body was that?
A. I think it was Sweeney's.
Q. Did you notice whether that body was burned or not?
A. No, sir.
Q. What room was that in?
A. In 16, I believe.
Q. What evidence of explosion did you find in 16?
263 A. Found after damp there and a body.
Q. Where were the greatest evidences of explosion found by you at any time after the explosion happened in going through these rooms?
A. I don't know where was the greatest.
Q. Did you notice the condition of the props in any of these

rooms at any subsequent examination which you made in any of these rooms?

A. Yes, sir.

Q. What have you to say as to their being charred or not?

A. They were charred.

Q. In what room were they charred the most?

A. Well, it was up around 16.

Q. Now, at the time you and Mr. Ray and Mr. Brown and the rest of you were in there getting out bodies and after Sweeney's body had been taken out, where did you go and what did you do?

A. I got just about knocked out and had to go home.

Q. Knocked out in what way?

A. With the after damp.

Q. When was the next time that you came down there and went into that entry?

A. About 9 o'clock in the same night.

Q. Were any bodies taken out of the mine while you were there at that time?

A. Yes, sir.

Q. Who took them out? Did you take any of them out?

A. Yes, sir.

Q. Whose did you take out?

A. Kelly and Flick.

264 Q. Did you go into room 8?

A. Yes, sir.

Q. In which way did you get into that room?

A. From the mouth of the room.

Q. That is off of the main entry?

A. Yes, sir.

Q. Where did you find Kelly's body?

A. Right at the corner of the cross-cut, at the last cross-cut.

Q. Did you notice Kelly's body as to whether or not it was burned?

A. No, sir.

Q. What other body, if any, did you find in that room?

A. Flick.

Q. Where did you find that?

A. Opposite the cross-cut.

Q. Did you notice whether or not his body was burned?

A. No, sir, I did not.

Q. When you went into the room state whether or not you found any danger signals or marks of any kind.

A. No, sir.

Q. Where was Flick's body with reference to the railroad track in room 8 when you found it?

A. I don't remember.

Q. What was the condition of the brattice in room 8 when you went in there after the explosion at the time you brought out the body of Flick?

A. It was laying down there, some of it.

Q. From any examination made by you of the conditions
265 existing in these rooms and in the 4th left main entry, subsequent to the explosion, have you formed any opinion as to the cause of that explosion?

A. No, sir.

Q. State whether or not from your examination of the conditions existing in these rooms and in that back entry, you have been able to arrive at any satisfactory conclusion as to the cause of that explosion.

A. No, sir.

Q. Now, during the time which you worked in gas-y coal mines, I will ask you whether or not you were accustomed to the use of what is known as a safety lamp.

A. Yes, sir.

Q. How many years prior to your employment in the White Ash coal mine had you been accustomed to the use of the safety lamp?

A. Seven years.

Q. Did you ever work in coal mines where any other lamps except safeties were permitted?

A. Yes, sir.

Q. Where was that?

A. Haswell, Morton.

Q. Where is that?

A. In England. Then in Ludworth all miners used safety lamps, and in Eldon part of the miners used safety lamps.

Q. I wish you would describe just as minutely as you can, Mr. Deighton, the condition of the inside of that door frame in the 4th left main entry. I will ask you the prior question, Were any of the frames broken?

266 A. No, sir.

Q. Was there a latch on that door?

A. No, sir.

Q. Was it a door ordinarily swinging to and fro?

A. Yes, sir.

Q. I mean by that, would it swing into the entry and out?

A. No, sir; it would open against the frame of the door.

Q. I wish you would describe to the jury just how that door worked against this frame, as to whether it would swing out towards the slope or not.

A. It would when it was pulled out towards the slope by the trapper.

Q. And with reference to that frame, could it be opened in towards the face of the 4th left main entry?

A. No, sir.

Q. Then if that door had been closed at the time of the explosion, Mr. Deighton, what would have been the effect of the force of that explosion on that door?

A. I think it would have broken it.

Q. Was the door broken?

A. No, sir.

Q. Well, with that door being open, I will ask you whether or

not any air could come into the 4th left main entry through that door?

A. Yes, sir.

Q. Whose business was it to attend to that door, Mr. Deighton?

267 A. The trapper's, I suppose.

Q. State whether or not that was the boy that was killed at that place.

A. Yes, sir.

Q. State whether or not it was his business to keep that door shut.

A. It was his business to attend to the door, the drivers coming through, he had to open it.

Q. And when drivers were not going through what was his business with reference to that door?

A. To keep it closed.

Q. You spoke this morning about a portion of the brattice up near room 18 of the 4th left hanging down from the roof. I will ask you whether or not—I will ask you what effect that had, if any, upon the circulation of the air at that place?

A. Up to the face of the entry, you mean?

Q. Where you spoke of this morning.

A. The air would go over the top there more than it would if it was right up to the roof.

Q. Would that interfere in any way with the circulation of the air in rooms 16, 17, 15, 14, and 13?

A. No, sir.

Q. Do you remember how far up from the last cross-cut in room 8 the rails had been taken up in that room?

A. No, sir.

Q. What do you mean by finding a little gas, Mr. Deighton?

A. Well, a little pocket or a lamp full. It may be in a little pocket, a place where a little rock fell out, or anything like that.

268 Q. Well, is the accumulation of gas which you designate as a "little gas" a dangerous accumulation of gas?

A. No, sir.

Q. What did you mean by a hatful of gas or a lampful of gas? Among miners what is that understood to signify?

A. It is not considered dangerous.

Q. Mr. Deighton, did you notice any difference in the ventilation of the mine on the morning of the explosion when you made your inspection, than any other time that you made inspections for a week or two prior thereto?

A. No, sir.

Cross-examination.

By Mr. FIELD:

Q. Had you ever been fire boss in a mine before you were fire boss in the White Ash?

A. No, sir.

Q. Do I understand you to say, Mr. Deighton, that when you found a dangerous body of gas in the White Ash mine, and marked it with a danger signal, that you had performed your full duty with reference to that body of gas as you understood it?

Mr. TWITCHELL: Objected to. There is no statement made by this witness that he ever found a dangerous body of gas in that mine.

Objection overruled. Defendant excepts on the ground
269 that it is improper cross-examination, and a hypothetical question not based upon facts in evidence. Nowhere has the witness stated that he found a dangerous body of gas.

A. Yes, sir.

Q. It was no part of your duty to go back and take that gas out?

A. Sometimes it was.

Q. Well, then when you found a dangerous body of gas and marked it with the danger signal, you had not performed your full duty with respect to that body of gas, as you understand it?

Mr. TWITCHELL: Objected to; the same objection as before; not having testified in his examination-in-chief that he ever found a dangerous body of gas in that room.

Objection overruled. Defendant excepts.

A. Yes.

Q. You had nothing further to do with it then?

A. If I didn't know a man or know about his ability, I would go back with him and take it out for him.

Q. Was it a part of your business, as you understood, as one of the fire bosses of that mine, to keep gas out of the open places in that mine?

A. Yes, sir.

Q. Did you perform that duty as you understood it?

A. Yes, sir.

Q. You found a body of gas in room 8 on the morning of Monday, the 25th of February, didn't you?

270 A. Yes, sir.

Q. And you didn't go back there again?

A. No, I didn't go back.

Q. You knew that room 8 was one of the worst rooms in that whole mine for gas, didn't you?

A. Yes, one of the worst.

Q. Wasn't it the worst room in the 4th left entry for gas and known to you to be so?

A. Yes, sir.

Q. And you think that you performed your full duty as fire boss there when you marked that body of gas as you have described and did not go back again?

A. Yes, sir.

Q. It never would have been incumbent upon you to go back to

that place and to look at that fire-mark again no matter how long you stayed in *in* that mine, would it, Mr. Deighton?

A. Why, yes, I might have gone back and looked at it.

Q. Would it have been your duty to go back and look at it?

A. Yes.

Q. When?

A. Any time.

Q. Wasn't it your duty to go back the next day, and don't you know it was?

A. Well, it was an abandoned room and I had the necessary mark up there.

Q. Answer the question. Don't you know that it was your duty to go back to that fire-mark the next day?

A. Yes, sir.

271 Q. And every day until that gas was removed?

A. Yes, sir.

Q. And don't you know that it was your duty to remove that gas?

A. If I could.

Q. You could, couldn't you?

A. No, sir.

Q. No appliances in that mine whereby you could have removed that gas from there?

A. No, sir; I don't know if there was.

Q. As you understood your duty in that mine you had no right to remove that gas until somebody authorized you to do it?

A. No; I meant that I could not get it out, it was so far away from the cross-cut, and I had no authority to put in a cross-cut through to No. 9 room and drive it out of 8.

Q. Now, is it not a fact, Mr. Deighton, that from the amount of work that you had to do as fire boss in that mine and the time in which you were allowed to do it, immediately prior to this explosion, that you didn't have time to make any effort to get that gas out?

A. I had too much work, sure.

Q. Had you or not complained to the pit boss of the fact that you had more work than you could properly do, prior to the explosion?

A. Yes, sir.

Q. To whom?

A. To the foreman.

Q. Who was it?

A. Donohue.

Q. What, if anything, did Donohue say?

272 A. He said he was going to give us a man to help us.

Q. Did he do it?

A. No, sir.

Q. Mr. Deighton, you were asked about how the air was on the 4th left plane on the morning of the explosion. Do you know how the air was going to the 4th left plane that morning?

A. It was fairly good.

Q. Do you know which way the air was going?
A. It was coming up the plane into No. 1 room, through No. 1 and up the plane into the 3d left air course.
Q. Do you know anything about an opening on the upper air course to the plane, to let air into men on the plane, which did not go to face of the works in the 4th left?
A. I don't remember.
Q. An opening in a stopping, a board knocked off there, ten days or two weeks before the explosion, in the upper air course of the 4th left, which would let air into the plane from the parallel air course?
A. Will you allow me to look at that map?
Q. Certainly.
A. Yes, I remember a board being taken off there.
Q. Why was it taken off, Mr. Deighton?
A. To let the air into the plane.
Q. When, before the explosion, was the last time that you were through the 4th left air course from one end to the other?
273 A. I don't remember.
Q. Do you remember ever going through there while you were fire boss?
A. Yes, sir.
Q. Do you know whether you were through there within a month before the explosion?
A. I do not remember of being through there within a month.
Q. Do you know Ray, the fire boss — worked on the opposite shift from you, William Ray?
A. Yes, sir.
Q. Did you meet him down in the 4th left after the explosion?
A. Yes, sir.
Q. You met him up in the lamp-house, first?
A. Yes, sir.
Q. Did you have any conversation with him there?
A. He asked me what was the matter and I told him there was an explosion there, and where it was.
Q. Then what did you say?
A. I don't know.
Q. Didn't you say to him, "Billy, somebody has been in 8"?
A. I don't remember.
Q. Do you remember that you did not say so to him, Mr. Deighton?
A. No, sir.
Q. Now tell me, Mr. Deighton, if the first thing that came into your mind after you knew that that mine had blown up was not that somebody had gone into room 8 with a naked light?
274 A. I didn't know right then.
Q. I am asking you what the first thought had was?
A. Yes; that was my first thought.

Redirect examination.

By Mr. TWITCHELL:

Q. Mr. Deighton, did not every man in the White Ash mine and in the 4th left entry of the White Ash mine working there at that time know of the presence of gas in room 8?

A. I don't know if every man in the White Ash mine was. I know I have told lots of them.

Q. Did you tell the people working in the 4th left, in the particular locality of room 8?

A. You mean the men that were working in room 8?

Q. No; the men working in the various rooms there?

A. Yes; they about all knew it.

Q. Did Hawthorne and Holiday know of it who were working there?

A. Yes, sir.

Q. Did Flick and Kelly know about it?

A. I don't know, sir.

Q. Do you know of any other people working in the 4th left of your own knowledge that knew of the presence of gas in room 8?

A. No; I have no idea that I do know anybody that knew exactly about it, but I know that I told a good deal about it.

Q. When men would come into the mine in the morning would you tell them about the condition of the various working places?

275 A. Is that the place they were going to work in?

Q. Yes, sir.

A. Yes, sir.

Q. Did you ever put up any danger singals, fire signals, or anything of that kind in room 17 where the Deserants were working?

A. Yes, sir.

Q. Do you know whether or not they knew what that meant?

A. Yes, sir.

Q. Do you know whether Flick and Kelly knew what a danger signal of that kind meant?

A. I don't know. I never was very well acquainted with them and didn't know much about them.

Q. But every man working in the White Ash mine knew what a fire boss's signal was, didn't they?

A. Yes, sir.

Q. And when you had placed that signal over in room 8 and left it you considered that you had performed your full duty as fire boss, didn't you?

A. Yes, sir.

Q. And you had performed your full duty, had you not?

A. Yes, sir.

Recross-examination.

By Mr. FIELD:

Q. Did you think that there was a man that went into that mine to work on the morning of that explosion who knew or had any

reason to believe that 48 hours before you had discovered a
276 dangerous body of gas in room 8 on the 4th left and had not been back to that room since then?

Mr. TWITCHELL: Objected to as improper recross-examination, thoroughly gone into, and the very same question with the exception of one word as already been asked the witness on cross-examination.

Objection overruled. Defendant excepts.

A. No, sir.

Q. You reported that gas in room 8 to Donohue, the pit boss, didn't you?

A. Yes.

Rebuttal.

By Mr. TWITCHELL:

Q. Is it not a fact, Mr. Deighton, that in all gas-y mines gas is apt to accumulate in some particular place unlooked for at almost any time?

Mr. FIELD: Objected to as improper rebuttal examination.

Mr. TWITCHELL: I will ask it as a direct question, if the court please.

The COURT: Very well, go ahead; you can ask it as a direct question.

A. Yes, sir.

Q. Is it not also a fact, Mr. Deighton, that gas is apt to accumulate and that gas might have accumulated in room 8 within a very short period of time, even if you had been back there a dozen times and put on a dozen marks?

277 A. Yes, sir.

Q. And you considered that that danger mark which you put up there was a protection to everybody in the mine, is that not so?

A. Yes, sir.

Q. And you considered it as a protection to yourself, didn't you?

A. Yes, sir.

Q. And your danger in that mine was equal with everybody else's, is that not so?

A. Yes, sir.

Q. Your life was just as much at stake as anybody's, is that not so?

A. Yes, sir.

Surrebuttal.

By Mr. FIELD:

Q. Do you think your life was as much at stake as other people?

A. Yes, sir.

Q. Then how do you account for the fact that you are here today and that there were 24 men in that mine, who were in that mine that day, who are not here?

A. I didn't happen to be there.

Q. Was gas likely to accumulate unexpectedly in room 8 of that entry?

A. No, sir.

By Mr. TWITCHELL:

Q. You were just as apt to be in the 4th left entry as upon the 2d entry at the time that explosion occurred?

A. Yes, sir.

278 Q. And during the day that this explosion occurred your duties called you to all portions of the mine, is that not so?

A. Yes, sir.

Q. And it was just as possible for you to have been up there with Donohue or at the face of the entry as on the second left?

A. Yes, sir.

By Mr. FIELD:

Q. If you had been there with Donohue, Flick and Kelly would never have gone into that room with your consent with naked lights, would they, Mr. Deighton?

A. No, sir.

Witness excused.

ED SULLIVAN, called and sworn as a witness for the defense, testifies as follows:

By Mr. TWITCHELL:

Q. State your name and occupation to the jury.

A. Ed Sullivan, age 36. Do you mean my occupation now or at the time of the explosion?

Q. Both.

A. Driving at the time of the explosion and rope-riding now.

Q. Where were you working on the day of the explosion, Mr. Sullivan?

A. In the 4th left entry.

Q. At what particular business were you working?

A. I was employed driving a mule.

Q. What time did you go to work in the White Ash mine on that morning?

A. 7 o'clock.

279 Q. State whether or not, between 7 o'clock and half past 10 or just prior to the explosion you were up at the face of the 4th left entry.

A. I started at 7 o'clock and pulled two empty cars in the 4th left entry as far as No. 16 room. I pulled one car up 16 room and came back and hitched to my other car and pulled up 17 room. I then went into the face of the entry and got a loaded car and pulled it out to 18 where there was another loaded car standing on the entry. I coupled the two cars together and pulled them out to the slope. I then went across the 4th right plane, that is on the opposite side of the slope, and there was two men working on the plane and they wanted some cars. There was a loaded car on the plane switch. I

ran it down to the parting, coupled it on to the loads that was standing on the parting. I then pulled them up an empty car and waited until they loaded the car and ran the car down to the parting and pulled up another one so the two miners that were there told me they would let me know when they wanted another car. I say, "All right." I goes back to the 4th left. I had to wait in the 4th left about five minutes probably before the drivers came out. I was inside driving the 4th left that morning when these two drivers came out that were in there while I was in the 4th right, came out with their trips. I went down to the empty track and got two empty cars and took them in the first car into 18 room and the other car into the entry. I don't remember where I got my load. I got a load at 17 as I was coming out. I think it was 16 or 17. I think, as far as I can remember
280 now, that I had made about four or five trips. I would not be sure whether it was four or five, between 7 o'clock and 10.30, in the 4th left entry. When I came out about 10.20 or 10.30, Mr. Franklin, one of the men that was in the 4th right, he was in the 4th left parting and he told me that he would take a couple of cars. I says "All right." I just coupled on my two loads and went right across to the 4th right entry and I ran his load that was standing on the switch down to the parting. I then pulled him up an empty car and took my mule down to the 4th right parting and went right up and told him to hurry up and load the car. Well, I was only up there about five minutes until I heard some kind of a noise. I didn't know exactly at the time what it was and I hollers to the two miners that there was something the matter. They didn't hear me. They kept on loading the car until the car was loaded, and I ran that car down and pulled up another empty car, and when I pulled it up Harry Franklin said, he said, "There is something the matter," and he said, "We will go and see what it is." So we went across the slope to the 4th left and we met Mr. Merchant, the boss driver, who was on the slope at that time, and he asked me where I had been. I told him I was in the 4th right parting up across from the plane. I asked him where the trouble was and what was the matter. He said that he thought there was an explosion in the 4th left.

Q. Now, Mr. Sullivan, at the time that you were up by room 18, or the face of the 4th left entry, 20 minutes before this ex-
281 plosion, did you notice the air current or the condition of the air ventilation at that place?

A. Well, the air was going in there when I was in there at 9 o'clock or half-past nine.

Q. How was the air when you were up there the last time?

A. If I can remember it right now, when I went in at 9 o'clock they were going to shoot in the entry; they had a loaded car in at the time, and I told them not to shoot until I would get the car out. I don't know whether they shot before I got the loaded car out or not. I could not say now. I disremember. But I know when I was in there about 10 or 10.20 the air was all right in there.

Q. What effect, at the time or immediately after this shooting in

the entry, did the air have upon the dust and smoke following the shooting?

A. Well, the smoke was pretty strong for a while, but it didn't take it long to clear out.

Q. Well, it was carried out, was it?

A. Yes, sir.

Q. What kind of a lamp did you have in going up the 4th left that morning?

A. Well, I had an ordinary miner's lamp.

Q. Describe one of those lamps to the jury, what kind of a lamp it is, all about it, how much of a flame and what kind of a flame does it have.

A. Well, I should judge the flame of the lamp would be about an inch or two inches in diameter if it is burning right.

Q. Have you any recollection of what effect the current of air had upon that light as you were up in the entry at any particular place?

282 A. Yes, I remember it very well, that the blaze of the light was so strong in my eyes that I had to take the lamp off my hat in at the cross-cut when I went in with the car.

Q. Where did you wear that lamp?

A. I wore it on my cap.

Q. And you say the blaze was so strong in your eyes that you had to take your cap off?

A. No, sir, I didn't say I took my cap off. I took the light off my cap and held it in my hand.

Q. What do you mean by the blaze of the lamp in your eyes? Describe that to the jury.

A. Well, the blaze of the lamp, it burned in my eyes so strong that I could not see anything but the smoke and the blaze of the lamp, the two together.

Q. What caused that, Mr. Sullivan?

A. Well, I should think it was the draft of air that was there.

Q. And at what cross-cut was that?

A. That was the last cross-cut in the 4th left entry.

Cross-examination.

By Mr. FIELD:

Q. That was the last time you were in there before the explosion?

A. About 10.20, yes.

Q. The air was stronger then than you had noticed it at any time during the morning?

A. The air was the same then as it was any time during the morning.

Q. Did you have to take the lamp off any other time?

283 A. No, sir.

Q. Then it must have been stronger when you had to take the lamp off than when you did not have to take it off?

A. I was only in the cross-cut once before that, Mr. Field, before that that morning.

Q. How long before?
A. 7 o'clock, half past seven probably.
Q. How far was it from the cross-cut to the face of the entry?
A. Well, I did state in the last testimony that it was about 40 or 50 feet, but since then I have found it is further.
Q. Well, how far was it at that time?
A. At that time my statement was 40 feet.
Q. I don't ask you about your statement. I ask you now, if you know, to tell the jury how far it was from the cross-cut to the face of the entry at the time of the explosion without regard to your testimony at the last trial?
A. Probably 100 feet, probably 150; I didn't measure it, I could not exactly tell.
Q. Well, you have been making some inquiry, haven't you, Mr. Sullivan?
A. No, sir; only I have heard some witnesses state here that it was 100 feet.
Q. That is all you know about it?
A. That is all I know; yes, sir.
Q. Mr. Sullivan, did you see Donohue in the vicinity of room 8, when you made your last trip up that mine?
A. No, sir; I met Donohue inside the trap-door on the plane.
284 Q. When you made your last trip?
A. Yes, when I made my last trip on the 4th left.
Q. In what direction was he going?
A. Well, I think he was going in the 4th left.
Q. You mean the 4th left main entry?
A. Yes, he was standing on the plane switch.
Q. Did you see anybody in the vicinity of room 8 as you came out on your last trip?
A. No, sir.
Q. Didn't you see Kelly sitting at the neck of the room and Flick a little further up on the switch?
A. I seen Flick as I was going in once that morning, at the mouth of No. 8 room, but not as I — coming out.

Redirect.

By Mr. TWITCHELL:

Q. There is one question that I neglected to ask and I ask permission of the court to ask it. State whether or not, the condition of the air, as you found it, at 20 minutes after 10 on the morning of the explosion, was approximately the same as it had been for 15 or 20 days previous to that time, whenever you had noticed it at that place.
A. Yes.

By Mr. FIELD:

Q. It was no part of your business to know how the air current of that mine was, was it?
A. No, sir.

By Mr. TWITCHELL:

Q. You would know whether the air was good or not, would you not, Mr. Sullivan?

285 A. Yes, sir.

Q. And if you considered your life in danger, you would have done something with reference to the air circulation, if you — that was the cause of it?

A. Well, if I thought my life was in danger, I would not be in there at all.

By Mr. FIELD:

Q. You do not know of anybody else, do you, that would have been in there if they thought their lives were in danger?

A. No, sir, I suppose not.

Q. And you relied for your safety when working in that mine not, upon your knowledge of the conditions there, but upon the fact that the people that were employed by the company to protect your life, would do their duty, did you not?

A. Yes, sir.

By Mr. TWITCHELL:

Q. And that every other man in the mine would also perform his duty with reference to the rules and customs of the mine? Is that not so, Mr. Sullivan?

A. Yes, sir.

Witness excused.

JOHN HUNT, called and sworn as a witness for the defendant, testifies as follows:

By Mr. TWITCHELL:

Q. What is your name, age and occupation?

A. John Hunt, age 32, coal-miner.

Q. How many years have you been a coal-miner?

A. About 22 years.

Q. Ever since you were ten years old?

A. Yes, sir.

286 Q. In what countries have you worked as a coal-miner?

A. In England and America.

Q. What kind of work have you performed in coal mines?

A. Well, I think I have done everything in a coal mine now, except superintendent, and mine foreman.

Q. Well, what are the various occupations which you have performed?

A. Well, I started to keep a trap-door, driving, then "putting" as they call it, it is the same as driving; I ran inclines, I dug coal, I have timbered; I have caged coal; put the car on the cage and I have rid ropes, boss driver and fire boss.

Q. Have you ever worked in gas-y mines besides the White Ash?

A. Yes.

Q. Where?
A. I worked in England; I worked in Arkansaw, or Arkansas as they call it, Indian Territory, Colorado and New Mexico. I guess that's all that I know of.
Q. Do you understand the use of a safety lamp?
A. Yes, sir.
Q. When did you commence work in the White Ash mine?
A. Three years ago the first day of last May, I think, as near as I can remember, I know it was in May.
Q. Were you working in the White Ash mine on the 27th day of February, 1895?
287 A. I was from 12 o'clock on the 26th until about half past five in the morning of the 27th.
Q. That is, on the morning of the explosion when you quit work, was it?
A. Yes, sir.
Q. What particular occupation were you following in the White Ash mine at that time?
A. Boss driver.
Q. What was the duty of the boss driver?
A. Well, my duty was, I would go down there to the stable, see that all my drivers were there; if they were all there they would take their mules out and then when they would go down they got the harness of the mules and started to pull coal and I was there to look after them and see that the coal did come out. If they got off the track I would help them on. If we were waiting on coal the rope-rider and hustler would go down and pull water.
Q. Were you familiar with all the entries in the White Ash mine?
A. Yes, sir; I travelled over them all, that is, that were working.
Q. I will ask you whether or not during the month of February, 1895, you as boss driver superintended the hauling of water out of that entry?
A. Yes, sir; I was supposed to see that it was got out.
Q. I will ask you whether or not during the month of February, you actually did haul water out of that mine, and if so, how approximately?
288 A. Well, sir, I hauled water out of that mine every night that I was on as boss driver.
Q. Were you boss driver during the month of January?
A. No, sir, not all the month of January.
Q. As compared with the water hauled out by you during your employment in the month of January, did you haul more or less during the month of February?
A. Well, I wasn't boss driver all the month of January.
Q. Taking an even number of days in January and February, did you haul more water out in those days in February than you did in January?
A. Well, I could not say whether I hauled any more out in January than I did in February, nor I could not say whether I hauled any more out in the month of February than I did in January.

Q. About how many cars of water did you haul out every night during the month of February when you were in the position you occupied there?

A. How many cars the whole shift do you mean?

Q. Yes.

A. Well, that I could not say, sir.

Q. Well, about how many, of course not exactly how many, but about how many?

A. I think as near as to my best recollection, I have hauled from three to seven trips in the shift.

Q. Well, how many cars would there be to a shift?

289 A. Well, about the best I know of, say 8.

Q. Eight to the trip?

A. Yes, sir.

Q. And was that about the same amount that you hauled out during the time you served in the same capacity during the month of January?

A. Well, that is what I said I hauled, from three to seven trips, I said, as near as I could remember.

Q. Then if you hauled three trips, eight cars to the trip, how many cars would that be?

A. That would be 24 cars, three trips.

Q. And if there was seven trips?

A. That would be 56.

Q. On the night prior to the explosion, Mr. Hunt, can you state what the condition of the air and ventilation was in the White Ash mine?

A. Well, sir, I never found any difference in it from the first day I went into it, any more that night than it was the first day I went into it.

Q. Was that condition good or bad?

A. Yes, it was good.

Q. I will ask you, Mr. Hunt, if you know what a fire boss's danger signal is?

A. Yes, sir.

Q. I will ask you what the significance of a fire boss's danger signal placed upon a railroad tie across a railroad track in a room of that mine would be to any miner in the mine?

A. What is the meaning of that word significance?

290 Q. What idea does that convey to the men, what does the miner understand when he sees that signal?

A. Well, if he sees the fire boss's mark on a tie or anything else and his initials, the day of the month, one cross signifies gas, a little; if it is a big cross, a little more; if it is two crosses, nobody is too cross that; that is what they call among the miners the "danger line."

Q. Was that fact known to every miner in the White Ash mine and to miners generally?

A. Well, my experience in a coal mine is, I should judge a miner would know it. Of course I ain't speaking for every man. I am speaking for myself alone.

Q. And you are a man of how many years' experience in coal mining?
A. 22 years.
Q. What is your position now, Mr. Hunt?
A. I am fire boss in the Cook & White mine, Madrid.

Cross-examination.

By Mr. FIELD:

Q. You had not been a fire boss up to the time of this explosion, had you, Mr. Hunt?
A. O, no, sir.
Q. You graduated into a fire boss since that time?
A. I have held the position after that.
Q. You are now employed by the defendant company?
291 A. I am employed by what is known as the Cerrillos Rail and Coal Company, I think it is.
Q. Now let us confine ourselves to the time before the explosion in the White Ash mine. Is it not a fact that you never hauled any water out of the White Ash mine on your shift when there was any coal to haul?
A. I hauled water out every shift that I was in that mine as boss driver.
Q. That does not quite answer the question. Is it not a fact that you never hauled water when there was any coal to haul?
A. That's right. Now you're talking. No, sir, I could not haul water and coal both together.
Q. And your instructions were to give the preference to the coal?
A. Yes, I would hoist coal as long as it was there.
Q. And then if you had any time to haul water you hauled that?
A. Yes, sir.
Q. You say you had been through all the entries of the White Ash mine prior to the explosion; that is before the explosion?
A. Yes, sir.
Q. When had you been through the 4th left back entry before the explosion?
A. In the month of January.
Q. You had not been through there in the month of February?
A. No, sir.
Q. When in the month of January?
292 A. I was through all the entries in the White Ash mine one night in January.
Q. But after that you were never in the 4th left back entry before the explosion?
A. No, sir.
Q. Now, do you know, Mr. Hunt, where the water came from that you hauled out of that mine in the month of February?
A. Well, I know where it came from; where it was got into the car.
Q. Where?
A. There was some water in the 5th right back entry. There

was a syphon pipe in there. They syphoned it down into what they called No. 1 syphon or sump, and there was a syphon in the 4th left, syphoned in down from that syphon into the 7th left, and there was some water then in what was known as the 7th right.

Q. There was also some water at the face of the slope?

A. Sometimes.

Q. Whenever there was water at the face of the slope, you had to move that, didn't you?

A. Yes, when there was too much there for the diggers to work.

Q. And if you did not remove it the diggers could not work?

A. Not if there was too much.

Q. How much was too much, Mr. Hunt?

A. Well, a car-load would be too much for a man to work in, in a deep place.

293 Q. The water from the 4th left when the syphon was running went to the face of the slope, didn't it?

A. No, sir.

Q. Where did it go?

A. Went into a sump in the 7th left.

Q. You are sure that it did not go across the railroad track into the 7th right?

A. Well, there was some that went across there to the 7th right, yes.

Q. And there was some that came down the same direction into the 7th left?

A. Yes, sir.

Q. What turned it into the 7th left in place of going to the face of the slope?

A. It had a straight shoot; didn't take any turning at all.

Q. Is not the slope straight down?

A. Yes, straight down.

Q. You mean to say that water would cross the railroad track in the slope and then run into the 7th left?

A. The water came down the back slope, right straight down the back slope into a sump pretty near parallel or opposite the back slope; it was a little ditched in.

Q. That water didn't ever go into the main slope, at all, did it?

A. It would never go in if the sumps were kept down.

Q. Well, if it wasn't kept down, then what?

A. It would run over then into the slope, I judge, or perhaps into some other place in the back slope.

294 Q. Now, is it not a fact, Mr. Hunt, within your knowledge of the method of operating that mine, that when that syp-on pipe within the 4th left was running, the water had to be brought to the surface or it would go to the face of the slope and stop the works there?

A. Yes, if it was never hauled out, it would go to the face of the main slope.

Q. Is it not also a fact that the water was left in the 4th left?

A. I don't know anything about it.

Q. And not allowed to run down there because there wasn't time to haul all of the coal and all of the water?

A. Not that I know of, sir.

Q. There wasn't time to haul all the coal and all the water, was there?

A. Well, I don't know how much water there was left.

Q. You frequently had to leave water in the mine that you ought to have brought out because you didn't have the time?

A. I never drained the sumps dry.

Q. You frequently had to leave water in the mine that ought to have been brought out, because you didn't have the time to get it out didn't you?

A. Well, I should judge there was some left in these sumps, yes, sir.

Q. And the only reason that it was left was that you didn't have time to get it out?

A. I guess so.

Q. You say that you know all about a fire-mark?

295 A. Well, I think I do.

Q. And you did at the time of this explosion?

A. Yes, sir.

Q. Well, now, when you went to work on the night before this explosion, Mr. Hunt, did you know, or did you have any reason to believe that 48 hours before, or before that, before the time of the explosion, the fire boss had discovered a dangerous body of gas in room 8 and had marked it with a danger mark, but had not been back there since? Did you know anything about that?

Mr. TWITCHELL: I object to the word "dangerous" with reference to the gas, because this witness has not been asked about any such question; it is a hypothetical question not based upon any facts brought out in the direct examination of the witness and because it is improper cross-examination.

Objection overruled. Defendant excepts.

A. Within 48 hours did I know that the fire boss——

Q. At the time that you went to work did you know anything about it—that the fire boss had discovered a big body of gas?

A. No, sir, I never heard him say that he had discovered a big body of gas at all.

Q. Did you know or have any reason to believe that if the fire boss did discover a dangerous body of gas in an open place in that mine that he would leave it marked only with a danger mark for as much as 48 hours?

Mr. TWITCHELL: Objected to as improper cross-examination
296 and a hypothetical question based upon statements not in evidence in the examination-in-chief.

Objection overruled. Defendant excepts.

A. Well, no, sir, I don't believe he would.

Q. Mr. Hunt, at the time you went to work in that mine on that occasion, the night before this explosion, did you know or have any

reason to believe that the 4th left air course of that mine was seriously obstructed by water?

Mr. TWITCHELL: Objected to as a hypothetical question based upon facts not in evidence; nothing testified by this witness with reference to obstruction in the 4th left air course.

Objection overruled. Defendant excepts.

A. No, sir, I had no reason at all to believe that was obstructed by water.

Q. Upon whom, Mr. Hunt, did you rely for your personal safety in that mine?

A. Mr. Field, as far as I am experienced in a coal mine, I rely upon my own self. If I find any obstruction in the air and I think it ain't quantity to support me, I will make a kick to the foreman, and if he don't attend to it, and it don't suit I will go somewhere else.

Q. Do you rely upon the foreman performing his duty, Mr. Hunt?

A. Yes, to a certain extent.

Q. Would you as a competent miner work in a mine for an hour if you had reason to suppose that the foreman was neglecting proper precautions for your safety?

297 Mr. TWITCHELL: Objected to as a hypothetical question not based upon any evidence brought out.

Objection overruled. Defendant excepts.

A. No, sir, I would not.

Q. Would you as a prudent miner, work for one hour in a mine if you had reason to suppose that the fire boss was neglecting proper precautions for your safety?

Same objection. Objection overruled. Defendant excepts.

A. No, sir, I don't believe I would.

Q. Your understanding of the fire-mark was that two crosses meant a dangerous body of gas, is it not?

A. No, sir, I didn't make that remark.

Q. Well, what was your understanding, that it did or did not indicate a dangerous body of gas?

A. I distinctly stated that one cross, a little cross, signified a little gas, and a big cross, one single cross, a little bigger, and two crosses what is known amongst miners as the danger line, for no one to go across, but still, furthermore, it might not be a dangerous body of gas.

Q. Your idea being, Mr. Hunt, that it might be dangerous to go across the fire-mark, and still the gas would not be dangerous?

A. My idea is, as an experienced miner, I have put two crosses on this dead line or danger line, but still there wasn't over a lamp full of gas in the place, simply because I wanted it out of there, and I would not let anybody go across it.

298 Q. Then your understanding was that whenever there was two crosses put there the best thing to do was to get the gas out?

A. Yes, I would do it.

Redirect examination.

By Mr. TWITCHELL:

Q. There never was a time during the month of February, was there, when you were hauling coal out of the mine that you did not have time to haul water?

A. No, sir.

Q. But if there had been such an occasion you would have worked overtime, would you not?

A. Yes, sir.

Q. Now, you spoke about having gone to all the entries of that mine on one occasion. How did you happen to go through all these entries, Mr. Hunt?

A. Simply because I was put on as night boss that night.

Q. And you went through all the entries on that account, did you?

A. Yes, sir.

Q. How long was that before the explosion?

A. Well, I could not say exactly; I believe it was the second week in January, as near as I can recollect.

Q. During the month of February, did you haul water out of the 7th left?

A. Yes, sir.

Q. Continuously during that month?

299 A. Every night when I was on boss driver I hauled it out.

Q. And from the sump in the 7th left, the water came down out of the syphon in the 4th left?

A. Yes, that is where it would come to.

Recross-examination.

By Mr. FIELD:

Q. Did you ever see the water come from the 4th left to the 7th left sump?

A. Yes, sir.

Q. When?

A. I don't know, could not exactly say.

Q. Had you seen it run within a month before the explosion?

A. I could not say.

Q. Could not say that you had, could you?

A. Yes, sir.

Q. That you had seen it run within a month?

A. Oh, no, that I had seen it running.

Q. You had seen it running but you don't know whether it was a month before the explosion or a longer time?

A. Yes, sir.

Q. Did you work overtime hauling water during the month of February, 1895?

A. Well, I could not say, but I have stopped overtime lots of times since I was on there, hauling water.

Q. You don't know whether or not you did during the month of February?

A. Well I would not be positive whether I did or not.

300 Q. As you understood the operation of that mine, during the month of February, the idea was to get out all the coal you could?

A. Yes, I got out all the coal there was.

Rebuttal.

By Mr. TWITCHELL:

Q. And you got out all the water there was on your shift, didn't you?

A. I left some in some of the sumps.

Q. And for all you know, Mr. Hunt, that syphon running down from the 4th left to the sump in the 7th left might have been running a week or ten days before the explosion?

A. It might be for all I know.

Surrebuttal.

By Mr. FIELD:

Q. But you didn't see it.

A. I seen it running, but, as I told you before, I could not tell you when it was.

Q. But when it did run on your shift you saw it?

A. I seen it running but I don't know when it was running.

Q. If that syphon pipe ever did run on your shift, you saw it, didn't you?

A. I must have been in the mine and I must have been working, yes, decidedly.

By Mr. TWITCHELL:

Q. And you hauled water out of the sump in the 7th left every night during the month of February so far as you remember, is not that so?

A. Yes, sir.

301 Q. And for all you know that syphon may have been running at various times during the month of February, is that not so?

A. Yes, sir.

Q. And the water running into the sump in the 7th left would come from the 4th left back entry?

A. Yes, as far as I know, that is where the syphon is they told me it came from.

By Mr. FIELD:

Q. All of the water in the 7th left came from the 4th left?

A. All the water in the 4th left? Didn't I distinctly say as far as I know it came from the 4th left.

Q. All the water in the 7th left came from the 4th left?

A. As far as I know I guess it came from the 4th left; it decidedly came into the 7th left.

Q. Didn't the 7th left make water?

A. No, sir, I don't believe the 7th did make water. She was only a little ways from the slope I think.

Q. Did any water come to the 7th left except from the 4th left?

A. Well, I don't know; there might some have come from the 6th or from the roof or some other place.

By Mr. TWITCHELL:

Q. Is it not a fact, Mr. Hunt, that the 5th and 6th left were run through rock faults and were dry as a bone, and the 7th left as well?

302 A. Yes, that is right; that is what the 5th and 6th left was driving in, in a fault at the same time; I believe I am pretty near sure of it.

Witness excused.

This case adjourned until Monday, 12, 27, '97, at 9 a. m.

Court met pursuant to adjournment.

Mr. TWITCHELL: By agreement the testimony of John W. Fleming given on the former trial of this case may be read to the jury as part of this case.

The testimony was thereupon read to the jury and is as follows:

JOHN W. FLEMING, called as a witness for the defendants, being first sworn and examined by Mr. Twitchell, testified:

Q. State your name, age, and occupation.

A. John W. Fleming, 42 years old. I am now United States coal-mine inspector for the Territory of New Mexico.

Q. How long have you held that position?

A. Since May, 1894.

Q. Do you know the White Ash coal mine, in Santa Fé county?

A. I do.

Q. In the course of your official duty as coal-mine inspector did you ever inspect that mine?

A. I did.

Q. How often did you inspect it?

A. About every thirty days.

Q. Do you know when the explosion occurred in the White Ash coal mine in February, 1895?

A. I do.

303 Q. How long prior to the day of the explosion was it that you inspected the mine?

A. I think the explosion was on the 27th of February, and I think I was at the mine on the 24th of January.

Q. In inspecting the mine, state whether or not you inspected

the means by which the mine was ventilated and how you inspected it?

A. Well as a general thing, when I go into a mine, I take the intake just above the overcast and then go to just above the split, down the slope, where the air separates from right to the left and then I take it below the split down close to the last return on the left, and then I go into the entries and take it along up in the last cross-cuts generally through the mine, until I get to the top workings. Other times I start at the top and go down through the workings the same way.

Q. The last time you inspected the mine, did you take these measurements?

A. I did, in most of the places; I would not say that I took it in every place.

Q. How do you take air measurements?

A. With an anemometer.

Q. Who went with you at the time you made these measurements?

A. Donohue was with me on that trip.

Q. Do you know the superintendent of the mine?

A. Yes, James Duggan.

Q. Did he ever accompany you in inspecting the mine, with reference to taking the air measurement?

304 A. Several times.

Q. How many mines in the Territory of New Mexico, coal mines, in the course of your business, do you inspect and what are they?

A. Well, I think there is twenty-three or four, altogether.

Q. Name them the best you can.

A. Well, we will commence with Gallup, there is the Crown Point, Gallup mine, Caledonia, Beacon Hill, the Bailey, Rocky Cliff mine, then at Cerrillos there is the White Ash, Lucas, and the Miller Gulch, at Blossburg, that is in Raton, in that district, there is the Blossburg mine, Smith mine number two, the Lone Cedar, the Mesaner, then at Monero, in Rio Arriba county, there is the Monero and one adjoining it, I do not know the name of it, owned by Mr. Craig, he claims it, the Somners mine, and one other mine there. I think that is all there are on this side.

Q. So far as the circulation of air is concerned, in the White Ash mine, on the day you last inspected it, and the means by which the mine was ventilated, state what was the condition of the mine?

A. I considered it in very good condition.

Q. Have you got notes of the air measurement taken by you the last time you inspected the White Ash, with you?

A. I have got the air measurements for the time before the explosion.

Q. Where are they?

A. Down to the hotel, I think.

305 A recess was thereupon taken till this afternoon, at two o'clock.

On the afternoon of April 27, 1896, met pursuant to recess.

Examination of JNO. W. FLEMING continued by Mr. TWITCHELL:

Q. Can you give the results of the last measurement for air, made by you in the White Ash mine, by memoranda taken by you?

A. No, sir.

Q. I mean before the explosion?

A. Yes, sir.

Q. Please give them.

A. At this time I took the first measurement above the seventh right and left entries; that is what is called above the split. At that place I got 16,470 cubic feet of air per minute. On the seventh right, then, I got 4,462½ cubic feet. In the seventh left return, I got 9,100 cubic feet. Then I did not take it in the fifth. I believe there was only two men working in the fifth left entry at that time, working in the fault. I then went to the fourth left, the last cross-cut, fourth left, front or back entry—the fourth left is the air course at that point. I got 4,814 cubic feet. Then in number three, left entry, that is where the number six room connected them with back air course of number three. I took a measurement there. I got 9,120 cubic feet per minute. I then went into the last cross-cut, number three left, and there I got 4,895 cubic feet per minute. Then at that time I believe number one, number two was not working. I went then to just above the overcast in the slope and
306 took the intake, that is the air going into the mine, and got 42,120 per minute. Then I went into the return air course, and that is where it returns from the right and from the left, after going through the mine, and I got 42,900 cubic feet per minute. That is the air measurements for that time.

Q. At the time you made the measurement at the face of the fourth left how many men were working at the last cross-cut on the fourth left? How many men were working on the fourth left?

A. I have got it marked here, rooms working from five to seventeen, that would be twelve rooms working, and there are generally two men in a room.

Mr. FIELD:

Q. Would not that be thirteen rooms?

A. Includes five and seventeen, yes. That would be 26 men and there was two men working in front entry, would be 28 men.

Q. As compared with the other mines in the Territory of New Mexico which it is your duty to inspect, Mr. Fleming, with reference to ventilation, what have you to say of the White Ash mine, prior to the explosion?

Objection as irrelevant and immaterial, incompetent, and because if every other mine in the Territory was badly ventilated, it would be no excuse for the bad ventilation of the White Ash. Sustained. Exception by defendant.

307 Cross-examination of the witness FLEMING:

By Mr. FIELD:

Q. There were a driver and two men working in that entry, were there not?
A. Yes.
Q. And there was another man or two working in that entry too at times, wasn't there?
A. Yes, they worked if there is anything to do, but I do not recollect seeing any in there.
Q. You don't remember whether there was any or not?
A. No.
Q. How many animals were there at that time, if you know?
A. I do not know.
Q. At the time you took that measurement, then, at the last cross-cut and fourth left, it indicated less than five thousand cubic feet of air per minute circulating in that entry, didn't it?
A. Yes, 4,814 feet.
Q. What kind of an anemometer did you use?
A. Byron's.
Q. Is that the instrument prescribed by the Government for making air measurements?
A. Well, it is not——

Objection that that is not material and is not proper cross-examination. Question withdrawn.

Q. Is that the instrument prescribed by the Government?
A. There is none prescribed by the Government. I got
308 this anemometer from Mr. Spears, after he went out of office, the same one he used all the time.
Q. He was your predecessor in the office of mine inspector?
A. Yes.
Q. Mr. Duggan was not with you on the occasion of this last measurement before the explosion, the one we are talking about now?
A. No, sir.
Q. And that was on the 24th of January, 1895?
A. Yes.

Redirect examination.

By Mr. TWITCHELL:

Q. Who was with you at the time?
A. Mr. Donahue.

Witness excused.

ROBERT MCKINLEY, called and sworn as a witness for the defendant, testified as follows:

By Mr. TWITCHELL:

Q. State your name, age and occupation.

A. Robert McKinley; age, 52 years last March; occupation, miner.

Q. What was your occupation on the 27th day of February, 1895, Mr. McKinley?

A. Well, I was still a miner.

Q. Where were you working at that time?

A. In the 2d left entry.

Q. Of what mine?

A. White Ash mine.

Q. How long prior to the 27th day of February, 1895, had
309 you been a miner, Mr. McKinley? How long have you been engaged in that business?

A. About 40 years.

Q. How long had you worked in the White Ash mine prior to that explosion on the 27th day of February, 1895?

A. About two months, I think, at that time.

Q. Will you please point out on the map where the 2d left entry of the White Ash mine is, and what room or place you were working in, if you can, on that map?

A. I don't know that I am able to do it; I never looked at any map of that kind, but I suppose I can find it.

Q. You will find the 2d left marked on the right-hand side of the map.

A. I was working up here in No. 5 room, a room that had no track in it; it was abandoned and finished.

Q. What were you doing there; what was the class of work that you were performing, Mr. McKinley?

A. I was running a diamond drill.

Q. What, if anything, unusual, occurred on the 27th day of February, 1895, in the White Ash mine?

A. Well, some time after 11 o'clock, I think it would be, I felt something unusual; something that sounded like an explosion went through my head like the closing of the drums of my ears, and canvas shook around me.

Q. In what part of that room were you working at that time with reference to the face of the room?

310 A. Right at the face.

Q. How was the air conducted up to the place where you were working, if you know?

A. I don't know anything about the workings behind me, but the air came through a cross-cut from No. 6 to me, and the air led up to my place with a canvas.

Q. What was the condition or sufficiency of that air at that particular place, that is, the face of room 5 on the second left?

A. Well, right at that point there was sufficient for myself and

two men that worked with me going up to the face behind the canvas.

Q. Have you had experience in working in gas-y coal mines other than the White Ash, Mr. McKinley?

A. Yes; a little.

Q. Do you know what the fire boss' danger signal was, as used in the White Ash mine prior to *to* the day of the explosion, Feb. 27, 1895?

A. Yes; crosses were used as signals.

Q. What information would a fire boss's signal convey to you, Mr. McKinley, if you should come across one in the White Ash mine at that time?

A. Well, I would know if that mark was there opposite my place that there was some gas in there.

Q. What would be your action with reference to anything before an inspection would be had or before some employee of the company would direct you with reference to that mark?

311 A. I would stay there until the fire boss came and cleared that place for me and told me it was all right.

Q. How long prior to the explosion had you been working in the White Ash mine with reference to the month of February, had you been working in the mine during the entire month of February? You had worked there during January and February, 1895?

A. I said that I thought I had worked there about two months; I am not certain to a day the day I went there.

Cross-examination.

By Mr. FIELD:

Q. When you went to work in the White Ash mine on the 27th of February, 1895, had you any knowledge or any reason to suppose that there was a dangerous body of gas in room 8 of the 4th left entry of that mine and that it had been there as much as 36 or 48 hours, and that no effort had been made to remove it during that time?

Mr. TWITCHELL: Objected to on the ground that it is improper cross-examination and a hypothetical question based upon facts not brought out in the direct examination of the witness. Objection overruled. Defendant excepts.

A. No, sir, I have no knowledge of it.

Q. Had you reason to suppose that that condition of things existed?

312 Mr. TWITCHELL: Objected to on the same ground and as calling for the opinion of this witness.

Objection overruled. Defendant excepts.

A. I don't know why I should. I have no access to the reports of the fire boss or anything of that kind.

Q. When you went to work in that mine on the morning of the 27th day of February, 1895, had you any knowledge or any reason

to suppose that the 4th left air course of that mine was seriously obstructed by water and had been so for many days before that day?

Mr. TWITCHELL: Objected to on the ground that it is improper cross-examination, nothing of the kind brought out in the direct examination, and as being a hypothetical question based upon facts not in evidence, nor upon matters upon which this witness was examined in his direct examination.

Objection overruled. Defendant excepts.

A. No, sir; that was away below where I was employed.

Q. You said, I believe, upon your direct examination, that you had no knowledge of where the air which you got came from except that it came through a cross-cut from room 6 to you?

A. I didn't mean to say I had no knowledge of where the air came from. I said I didn't trace back to give a description of where it came from, that is what I mean.

Q. I only want to get at your knowledge, Mr. McKinley.

313 Do you know whether or not the air which was coming to you on the morning of this explosion had been to the working places of the 4th left before it got — you?

A. I don't know of my own knowledge. It is supposed to go there before it comes to me.

Q. Do you know or not that some time from 10 days to two weeks before this explosion an opening was made in the upper air course of the 4th left plane whereby air from the return air course was taken to the men upon the 4th left plane and thence through the 3d and 2d left working places without going to any of the other working places in the 4th left except the plane?

Mr. TWITCHELL: Objected to as being improper cross-examination. Nothing said about this matter in the direct examination of Mr. McKinley.

Objection overruled. Defendant excepts.

A. I don't know anything about an opening at all. It is out of my line of business.

Q. As a miner working in the White Ash mine about whom or about what did you rely for your safety while you were so employed?

A. The mine boss and the fire boss.

Redirect examination.

By Mr. TWITCHELL:

Q. You also relied, did you not, Mr. McKinley, as far as your safety and security was concerned upon all the employees in the White Ash mine performing the duties with which they were charged, did you not?

A. Certainly.

314 Recross-examination.

By Mr. FIELD:

Q. And upon the fact that the company would rigidly enforce the rules made by it for your protection?
A. Yes, that is what I would suppose.

By Mr. TWITCHELL:

Q. And so far as you know they were enforced?
A. Well, I don't know anything different.

Witness excused.

FRANK SCHERRUBLE called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. What is your name and business?
A. Frank Scherruble; I am at present a coal-miner.
Q. How long have you been a coal-miner?
A. For about 8 years.
Q. Where were you working or what were you doing during the month of February, 1895?
A. I was employed in the White Ash mine mining coal.
Q. What shift were you working on at that time?
A. At the time of the explosion I was working on the night shift.
Q. Were you in the White Ash mine on the night prior to the explosion?
A. Yes, sir.
Q. What part of the mine were you in?
A. I worked in the 6th right, series, in the 3d room off the plane.
315 Q. How long had you been working in the White Ash mine at that time?
A. I believe I worked there since '92, to the best of my recollection.
Q. As to your having a sufficient quantity of air on the night of the explosion, please state what was the condition of the air in the White Ash mine at the place where you were working.
A. Well, the condition in our place naturally is good because the air had a very short distance to travel from the return.
Q. How long had you been working in that place at that time?
A. I could not say the exact time but it must have been, oh, about four months. We had about completed that room and it took us about four months, I think from the start.

Witness excused.
Court adjourned till 2 o'clock p. m.

Court met pursuant to adjournment.

JAMES DUGGAN, called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. State your name, age, and occupation.

A. James Duggan, age 43, superintendent of the Cerrillos Coal Railroad Company.

Q. What was your occupation on the 27th day of February, 1895?

A. Superintendent of the Cerrillos Coal Railroad Company.

316 Q. What particular business, if any, were you in charge of there with reference to the White Ash coal mine at Madrid?

A. I was superintendent of that mine.

Q. Where is that mine located, Mr. Duggan, what county?

A. Santa Fé county, New Mexico.

Q. On the 27th day of February, 1895, how long had you been superintendent of the White Ash coal mine?

A. About one year and nine months.

Q. I will ask you to state what your duties were as superintendent of the White Ash coal mine as you understood them.

A. My duties were to see that the mine was in safe condition and that all the employees of the mine attended to their work and their business.

Q. Did you perform that duty?

A. Yes, sir.

Q. Describe the White Ash coal mine as it existed at that time, Mr. Duggan, to the jury?

A. At that time the main slope of the White Ash mine was about 2,900 feet in depth, in a seam of coal averaging 5½ feet in thickness. The pitch of the seam was about 12 or 14 degrees. There was seven entries turned to the left of the slope and seven to the right.

Q. Are you familiar with the map there upon the blackboard?

A. Yes, sir.

Q. What does that map represent?

A. It represents the workings of the White Ash mine on the 27th day of February, 1895.

317 Q. Are you familiar with the way in which the White Ash mine was ventilated on that day?

A. Yes.

Q. I wish you would describe by the use of the map, Mr. Duggan. Point out the manner and course of the ventilation there through that mine on the day of the explosion.

A. The intake air started in at the mouth of the slope and was carried to the foot of the slope to a point at the lower entries on the slope where it split. The air on the left side returned on the lower cross-cut on the left side of the slope to the back slope, from the back slope continued up to the back entry of the sixth left, from this sixth left back entry into the face of it up through the last cross-cut into the sixth left to the main entry, returned to the main entry,

to the upper air course of the sixth left continued from there up the back slope to the back entry on the 5th left and through the last cross-cut of the back entry of the 5th left to the main entry. From the main entry it went up the plane of the 5th left and aired the rooms on the 5th left; from there to the back entry of the 4th left into the last cross-cut of the 4th left main entry, passed from that point through the face of all the rooms of the 4th left back to room 6. It was partially split at that point and continued from there over into the rooms on the plane of the 4th left, and returned from that point into room 1 to the back entry of the 3d left; from there to the last cross-cut in the 3d left entry, returned to the main and the faces of the room there and as far as room 8 and
318 through the faces there over into the plane of the 3d left, returned from there to the last cross-cut in the 2d left, returned from there to the main entry, through the faces of the rooms of the 2d left up to the 1st left back entry. From that point it reached the overcast over to what is known as the "Union" return, and from that point it reached the fan. On the right side——

Q. It is not necessary to describe the ventilation on the right side, of the mine, Mr. Duggan. I wish you would describe to the jury in as plain language as you can, without the use of technical terms, just how that fan operated in extracting from the mine all of the air, good, bad and indifferent, in all the various working places in the mine. Describe to the jury the effect of the fan upon the mine so far as the air was concerned.

A. Well, this fan, at the speed it was running at the time, was exhausting from the mine about 30,000 cubic feet a minute, and this current of air travelled around the mine in the course that I have stated there on the map, that is, one part of it, about ½ of it, and all impurities and everything in the mine in the air, powder, smoke, dust and everything of that kind, was carried around to the fan, and it was kept continually in that way, with fresh air going in as these impurities were carried out.

Q. Where was the air divided after it went in at the main intake?

A. At a point at the 7th, a little above the 7th left and 7th right entry.

319 Q. Do you remember how many men were working on the left side of the mine at the time of the explosion on the 27th day of February, 1895?

A. No, not just now, I don't.

Q. Do you know how many men were working on the 4th left at the time of the explosion?

A. Yes, I do within a man or two.

Q. How many men were working on the 4th left and on the plane and in the entry?

A. I think it was 27 or 28.

Q. At what velocity per minute did you say the fan was being worked on the day of the explosion?

A. It was making 75 revolutions a minute.

Q. What was the usual number of revolutions of that fan per minute?

A. That was the usual speed it was run at.

Q. Now, describe to the jury the manner in which the coal was taken out of the White Ash mine and the manner in which work was conducted in the mine under your superintendence at and before the time of the explosion?

A. All of the coal in the mine was shot from the solid, in the rooms and entries. It was loaded into pit cars by the miners, at the faces of their workings, and in the rooms that were driven from the faces of the entries to the main entries. It was taken from that point by the drivers to a point near the slope where the main haulage rope could reach it, and from that point it was taken to the surface by a steam-hoisting plant located at the top and there dumped into coal cars.

Q. During the time you were superintendent of the White
320 Ash mine and prior to this explosion, Mr. Duggan, please state whether or not you were familiar with the workings of what is known as a safety lamp and ever used the same in the White Ash mine?

A. I was and used it.

Q. Now, describe to the jury the various kinds of employees who were working in the White Ash mine on the day of the explosion.

A. At the time of the explosion there were what is known usually as company men and miners.

Q. Well, give the class of employees known as company men.

A. There would be foremen, rope-riders, rustlers, track-layers, timbermen, drivers, trappers, water-balers, miners and laborers, and fire bosses.

Q. State whether or not these men were engaged and employed by the Cerrillos Coal Railroad Company under your direction and superintendence at the time of the explosion.

A. Yes, sir.

Q. Did you know this plaintiff's intestate, Jules Deserant?

A. Yes, sir.

Q. Did you know plaintiff's intestate, Henri Deserant?

A. Yes, sir.

Q. And plaintiff's intestate, Henri Deserant, Jr.?

A. Yes, sir.

Q. What was their business and what were they doing in the White Ash mine on the day of the explosion?

321 A. Coal-mining.

Q. What system of check did you have upon coal-miners with reference to their employment, how were they carried on the pay-roll, by name and check or just by check?

Mr. FIELD: Objected to as not the best evidence. I fancy that the pay-roll would be the best evidence.

Objection overruled. Plaintiff excepts.

A. Carried by check number and name both.

Q. Who was the day foreman or pit boss of the White Ash mine on the day of the explosion?

A. John Donohue.

Q. Who was the day fire boss?

A. I think it was John Deighton.

Q. Who was the night fire boss?

A. William Ray or J. W. Ray, I think his name is.

Q. I will ask you to state, Mr. Duggan, to the jury what were the duties of the day pit boss or mine foreman?

A. His duties were to look after all the men in the mine, to see that they attended to their duties, and see about getting coal out of the mine and look after the safe condition of the mine in every respect.

Q. What was the rule in the White Ash mine during the time you were superintendent up to the time of the explosion with reference to the amount of powder which miners were permitted to take into the mine at one time?

322 A. Each miner was allowed to take one keg of 25 pounds at one time into the mine.

Q. Can you tell what were the regular hours of firing in the White Ash mine on the day shift?

A. Yes, sir.

Q. State them to the jury.

A. The hours for firing in the rooms were 12 o'clock in the forenoon and five o'clock in the afternoon, and in the entry or all narrow places such as entries it would be 9 o'clock in the forenoon and 12 and 3 and 5 in the afternoon.

Q. If this rule with reference to regular hours of firing were disobeyed by a miner what would be the result so far as that miner was concerned as to his being discharged or not?

A. He would be discharged.

Q. When did this rule with reference to taking 25 pounds of powder into the mine go into effect, per man?

A. It went into effect before my time there a short while.

Q. Was that rule in effect during the entire time that you were in charge up to the 27th day of February, 1895?

A. Yes, sir.

Q. State whether or not on the day of the explosion and on the days immediately prior thereto the coal was being mined in the 4th left main entry and in the rooms turned off of that entry, as it had been accustomed to be mined in the White Ash mine for 60 days prior to the day of the explosion?

A. Yes, it was, so far as I know.

323 Q. Was the White Ash coal mine what may be called a wet mine or a dry mine, Mr. Duggan?

A. Well, I would consider it a dry mine, although the right side was wet, but the left side was dry, and taking it all in all compared with other mines, I think it would be a dry mine.

Q. At the time of the explosion, Mr. Duggan, how many years had you been engaged in the business of mining? State to the jury as best you can your entire experience as a miner from the

time you first performed any work within a mine up to the time of your acceptance of the position of superintendent of the White Ash coal mine?

A. Well, I started in the mine when I was 13 years of age, and I worked in mines and mills and prospected for coal. These mines consisted of copper mines, silver mines, iron mines and salt mines, and I worked in a machine shop for three years, so that I was connected with mines for about 25 years up to the time of the explosion.

Q. I will ask you to state whether or not, Mr. Duggan, at the time of the explosion in the White Ash mine you were or were not entirely familiar with the workings of the White Ash coal mine and of the manner in which it was worked, and whether or not you performed the duties incumbent upon you in that position?

A. Yes, I was familiar with every working place in the White Ash mine, and I think I performed my duties right to the letter there.

Q. I wish you would state whether or not examinations or inspections, if any, were made of the conditions of the White Ash
324 coal mine in all its parts and workings, and if so, when, and by whom?

A. I made a thorough inspection of all the places in the White Ash mine myself, and the foreman about three weeks before the explosion. This included every abandoned place and working place that was in the White Ash mine that was accessible.

Q. And what was the condition found by you at that time?

A. The condition of the mine showed everything to be in good shape.

Q. Whose business was it, if anybody's, to make daily inspections of the working places in the mine before the men went to work?

A. The fire bosses'.

Q. To whom, if anybody, were reports of the condition of that mine made?

A. Do you mean by the fire bosses?

Q. No; I mean reports of the conditions. The foreman for instance was in charge of the underground workings, and from the foreman to you, and from the foreman to people working under him, fire bosses, and everybody else, state to the jury how reports of the conditions were made?

A. The fire bosses would report to the foreman and the foreman would report to me.

Q. Who had charge of and whose particular business was it to measure the work and the product of the miners in the White Ash coal mine?

A. It was my business.

Q. How often would you do that?

A. Once a month.

325 Q. Do you know of your own knowledge what, if any signs, or marks, were used by the fire bosses in indicating to the miners employed in this mine the localities in which they should not go and in which they could go to perform their labors?

A. Yes.

Q. What were these marks?

A. The marks would be an X, XX and XXX, and the words danger or fire written across the entrance to the place.

Q. Now, describe to the jury, what these several marks meant to the miner or to anybody else working in the White Ash coal mine on the day of the explosion from the superintendent down?

A. When these marks were posted across the entrance of any working place or any place, it was a sign for any one not to cross over that except it would be the fire boss himself with a safety lamp or the foreman. The foreman had the authority to go over this place with safety lamps and investigate them.

Q. What were the dimensions of the main slope and the entries in that mine, Mr. Duggan?

A. Nine feet in width and the height of the coal.

Q. What were the dimensions of these parallel slopes?

A. Nine feet wide and the height of the coal.

Q. What were the dimensions of the main and back entry?

A. Nine feet wide and the height of the coal.

Q. What were the dimensions of the cross-cuts between the main and back entries?

326 A. They were the height of the coal and always not less than 7 feet in width.

Q. What were the dimensions of cross-cuts between rooms?

A. The height of the coal and not less than 7 feet in width.

Q. Now, Mr. Duggan, please state to the jury how air was measured in the White Ash coal mine and who did that measuring?

A. It was measured by what is known as a Byram's anemometer, and was measured by myself every week or ten days.

Q. State whether or not you made any measurement of the air circulation and ventilation in the White Ash mine at any time during the month of February, 1895, and if so, when, and give the places where the measurements were taken, and everything in connection therewith, beginning with the last measurement taken before the explosion. Have you got the memorandum with you?

A. No, sir.

Mr. FIELD: There is no objection to the use of the memorandum as it appears in the record, page 459 of the printed transcript.

A. We took an air measurement on February 9, 1895. The measurements were as follows: On the main intake I got 31,150 cubic feet of air going into the mine. On the first return on the 7th left we got 4,418 cubic feet per minute. On the 7th right we got 4,720 cubic feet per minute. On the first left we got 12,276 cubic feet per minute; on the 1st right we got 20,720 cubic feet per
327 minute. On the slope at the 7th entry before the air split we got 11,376 feet. The next measurement was taken on February 23.

Q. How many days was that before the explosion?

A. Three days elapsed between that time and the explosion. This measurement was taken on Saturday evening, after all work was finished in the mine.

Q. Were there any men in the mine at the time that measurement was taken except yourself and whoever was with you?

A. No, not that I know of. The foreman himself took the measurement. It was after working hours and I understood everybody was out. The measurement of the main intake on that day was 28,700 feet of air. The air measurement on the 7th left was 5,202. On the 7th right was 4,000. On the 1st left there was 12,012 feet. On the 1st right there was 12,656 feet. On the slope at the 7th entry before the split we got 14,580 feet.

Q. Do you remember, Mr. Duggan, whether or not any measurement was taken of the air at or near the face of the 4th left main entry at that time?

A. No, not just at that time.

Q. When was the last time you made a measurement of air in the 4th left?

A. I could not tell now without referring to the reports that are on file.

328 Q. State whether or not the course of the air on the Saturday prior to the explosion was the same as the usual course of the air in passing through the White Ash mine.

A. It was the usual course, excepting that in the rooms in new work that would be started from time to time branches of the air current would be changed from time to time, to air the place, but the main air course was always the same.

Q. I wish you would describe, Mr. Duggan, the character of the stoppings in all the cross-cuts, both on the main slope and in the cross-cuts between the main and back entries, and in the cross-cuts between the rooms; describe fully.

A. Mostly all of the stoppings on the main slope were what is known as sand stoppings. These were made with two tiers of plank, nailed up to props, about 6 or 7 inches apart; and that space was filled with sand, and the planks were morticed into the coal on each side, about six inches, and it was filled from top to bottom on both sides, perfectly tight, almost making them air-tight. The cross-cuts between the main entry and the back entry in the first place was boarded up with inch board and then filled up with dirt, rock, slate and rubbish, such as that. Cross-cuts from room to room were always dirt stoppings.

Q. Now I will ask you to describe the character of the stoppings in the cross-cuts of the 3d left entry from the point where the entry—along the entire extent of the main and back entries of the 3d left.

A. Those were all board stoppings in the cross-cut, and then filled up with dirt known as rock, slate and everything of that kind.

329 Q. What was their capacity, Mr. Duggan, with reference to the turning of air and keeping the course of the air in its proper course and current in going through that mine?

A. Why, they were in such shape that wherever one of them were stopped up, the air would go beyond that point to an entry that was beyond it.

Q. Did these stoppings in the cross-cuts between the main and back entry of the 3d left perform the duty with which they were charged?

A. Yes, sir.

Q. What was the character of the stoppings in the cross-cut between the main and back entries of the 4th left entry?

A. Dirt stoppings with a board center.

Q. State whether or not these stoppings performed the duty with which they were charged.

A. Yes.

Q. I will ask you to state, Mr. Duggan, if there was a point at any place on this 4th left back entry, or the 4th left air course, by which air was supplied to the plane of the 4th left.

A. I know of no such place.

Q. I will ask you, Mr. Duggan, whether there was any such place in the 4th left back entry where the air was conducted up to the plane-room on the 4th left air course.

A. No, sir.

Q. Without first having been conducted up to the face of the 4th left entry?

A. No, sir.

330 Q. Now tell the jury just how these brattices and curtains were set in place in the White Ash mine.

A. All the brattice in the rooms was carried through the last cross-cut up to within 12 or 15 feet of the face of the room in order to bring the current of air close to the face, and it was conducted in the same manner in the main entries as in the back entries.

Q. How was this brattice set up and maintained in position?

A. In the first place there was props put up between the roof and the bottom. They were put about 7 or 8 feet apart. Then a board was nailed from one post to another on the top, and the canvass was nailed on to this board and on to the props also. The canvass was generally the width of the height of the coal.

Q. Can you state what the length of the 4th left main entry was at the time of the explosion, from the main slope to the face?

A. I could not tell now without referring to the map.

Q. Well, refer to the map.

A. 1,650 feet.

Q. What was the length of the 3d left entry?

A. 1,800 feet.

Q. How many rooms were being worked in the 4th left at the time of the explosion?

A. Five or six rooms, that is in on the entry from room 12 up to 18.

Q. State whether or not, Mr. Duggan, during the month of January, 1895, there was an inspection of this mine with refer-

331 ence to the air circulation therein, by any individual other than yourself.

A. Yes.

Q. By whom?

A. John W. Fleming, the territorial mine inspector for the Government.

Q. State whether or not you were with him at the time of this inspection.

A. I don't remember now whether I was or not; I don't think I was, though.

Q. Now, with reference to the water in the White Ash mine, Mr. Duggan, state whether or not it was the custom to haul water out of the White Ash mine, and if so, how was it done.

A. Water was taken out of the White Ash mine with water cars, in connection with the taking out of coal.

Q. Whose business was it to haul the water out of the mine?

A. The rope-rider had charge of taking it out.

Q. State whether or not, Mr. Duggan, any orders were ever given to any person to haul coal in preference to water.

Mr. FIELD: Objected to unless it is limited to orders given by him.

Q. —by yourself.

A. No, sir.

Q. Were any such orders ever given by anybody under your direction?

A. Not to my knowledge.

Q. To whom were reports made of the condition of the mine as to its safety?

332 A. To me.

Q. To whom were reports made of the condition of the mine from day to day with reference to the hauling out of coal, and to the amount of coal mined per day?

A. These reports were entered in the office by the weighman's tally.

Q. Do you have access to these reports?

A. Yes, sir.

Q. What do these reports show?

Objected to. The reports are the best evidence.

A. Show the daily production of the mine.

Q. Did you know John Donohue, the day foreman?

A. Yes, sir.

Q. What was his position at the time of the explosion?

A. He was day foreman of the White Ash mine.

Q. How long, at the time of the explosion, had he occupied that position?

A. Why, about two months, probably a little less.

Q. Who employed him?

A. I did.

Q. State whether or not at the time of your employment of Donohue, you gave him any instructions with reference to his duties as mine foreman?

A. I did.

Q. State whether or not at the time of his employment by
333 you as mine foreman he was competent for the position for which he was appointed?

Mr. FIELD: Objected to as calling for a mere opinion of the witness.

Objection sustained. Defendant excepts.

Q. Mr. Duggan, during the two months that Mr. Donohue was mine foreman, were you familiar with his manner of carrying out the instructions and performing the services which were incumbent upon him to perform?

A. Yes.

Q. I will ask you to state whether or not from your knowledge of the manner in which he performed his labors as mine foreman, he was a man competent for the position?

A. I considered him competent.

Q. How long had you known Mr. Donohue?

Objected to as cross-examination of his own witness.

Objection sustained. Defendant excepts.

Q. What other position, if you know, had Mr. Donohue occupied in the White Ash mine prior to his appointment as mine foreman?

A. He was a coal-miner and fire boss.

Q. State whether or not any complaint of any kind was ever made of you as superintendent, with reference to Donohue in the performance of his duties as a pit boss or mine foreman?

A. No, sir.

Q. How long prior to the explosion had the individuals
334 who were working in the 4th left at the time of the explosion, been working in that entry or the room turned off of that entry?

A. I don't remember the length of time any of them worked.

Q. Have you any record which will show how long the men worked in the rooms turned off of the 4th left and how long they had been working there?

A. Our records would simply show how long they had worked in the White Ash mine. It would not fix any certain place.

Q. Where were you, Mr. Duggan, at the time of the explosion in the White Ash mine?

A. I was at the coke ovens at Waldo station about three miles from the White Ash mine.

Q. How did you happen to be there?

A. It was part of my duty to look after the coke ovens.

Q. And you were performing part of your duty at that time?

A. Yes, sir.

Q. When did you first hear of the explosion?

A. About 11 o'clock, or 15 minutes after it occurred.

Q. Upon hearing of the explosion what did you do?

A. I went immediately to the mine.

Q. What steps, if any, did you take after you had reached the mine to ascertain where the explosion had occurred?

A. As soon as I reached the mine I made some inquiries on the surface about the explosion but I could not get any definite
335 information, and I went immediately into the mine and got down as far as the 4th left, about as far as room 12. The first man I came in contact with was Jim Merchant. At that time he was boss driver in the White Ash mine. I asked him where the explosion took place and he told me where he thought it took place. He said he thought that they had broke into the old Green mine from room 14 on the 3d left. He said a whole lot of water came rushing down and filled up the air course of that 4th left back entry.

Q. Was that the Jim Merchant, who testified here the other day?

A. Yes, sir, I remained in the mine until 12 o'clock that night, until we got all the bodies out, assisting all day in getting the bodies out.

Q. What do you mean by the old workings from which you said that Merchant had told you that the water had come down through the mine. Point them out on the map.

A. They are not on the map.

Q. Well, tell the jury what they were.

A. The old Green mine would be an entry or slope to the left of the White Ash mine which had been abandoned for some few years previous to the explosion, and there was no connection between there and the White Ash mine, but the workings on the 3d left entry were being driven in the direction of this mine.

Q. This old Green mine was never operated by this defendant company in any way, was it?

A. No, sir.

Q. What precautions were you taking, if any, to prevent breaking into the old Green mine?

336 Mr. FIELD: Objected to as irrelevant and immaterial. Objection sustained. Defendant excepts.

Q. You say that you stayed in the mine all that day. How far up the 4th left entry did you go after the explosion was over, Mr. Duggan, after you got into the mine?

A. I went in the 4th left entry as far as the last cross-cut.

Q. Tell just what you did in there.

A. I assisted in getting some of the bodies out from there and the rooms from that entry.

Q. Did you notice the condition of the rooms of the 4th left entry at the time you were in there subsequent to the explosion, at that particular time?

A. I did some.

Q. What, if any, evidences, of explosion did you find or notice in any of these rooms, on the day of the explosion and immediately after when you were there?

A. We found all timber and props all badly burned and scorched

and some of the canvas was burned and scorched, and found several powder kegs all rent asunder, and found coal dust that was blown up from the floor of the room on to the end of cars partially coked.

Q. Were you in room 16 or room 17 on the day of the explosion?

A. Yes, sir.

Q. What were the evidences of explosion in that immediate locality?

337 A. It was in room 16 or 17 that we found the coal dust coked, and the props were more burned in that vicinity than in any other part of the entry, around 16 and 17.

Q. What was the condition of the stoppings in the cross-cuts between the main and back entry of the 4th left?

A. They were all blown out into the air course of the 4th left from a point along in room 14 or 15, I don't remember just where we ran the air.

Q. Now, what was the condition of these stoppings in these cross-cuts in that entry prior to the explosion on the Saturday when you were in there, good or bad?

A. They were all good.

Q. And this Saturday, what Saturday was that with reference to the explosion?

A. It was four days before the explosion.

Q. On that Saturday state whether or not you were up at the face of the 4th left entry or in the last cross-cut.

A. No, sir, I was not.

Q. If you know, state what was the condition of the air current passing through the left side of the White Ash mine on the Saturday prior to the explosion when you were last there.

A. It was just as good as usual on the Saturday prior to the explosion as at any other time that I knew of.

Q. In what way could the air current be discovered, be inspected except by the use of the anemometer?

338 A. Well, if the air got any way deficient, that is any large percentage of it, it would be noticed by the miners in their working places from the effect of the current on the flame of their lamps, and the powder smoke remaining around in their places.

Q. If such a condition of affairs should exist, what would the miner do?

A. He would complain to the foreman of the condition of the air.

Q. State whether or not you have ever made any other examination of the rooms turned off of the 4th left entry and the 4th left entry in the White Ash mine.

A. Yes, sir.

Q. When was that?

A. It was about a week after the explosion with the coroner's jury.

Q. Who were they?

A. Mr. Rogers, of Cerrillos, Mr. Alexander, Mr. Green, Mr. Kin-

sell, Mr. Fleming, the territorial mine inspector, and Mr. Fletcher, the Santa Fé mine inspector, and there were two other jurors, but I don't remember their names now.

Q. State what you did at the time of your examination of the mine and who went with you, that is, who accompanied you personally in your inspection, what you saw and what you found.

A. On that day we took air measurement in the White Ash mine. We went all through the air courses, we went, in the first place, from the mouth of the slope to the foot of the slope and returned
339 on the left side along the course until we came up to the 4th left back entry. At that point there was water in the 4th left back entry and the jurors did not want to get their feet wet in traveling through there, so we came out to the main slope again and went into the face of the 4th left main entry, and returned from that point through all of the rooms on that entry and investigated the conditions of everything in all the rooms on that entry. I don't remember how much further up we went now; we went to the 3d probably.

Q. What was the condition of the brattices, props and timbers and miners' boxes and powder kegs and everything else usually found in a coal mine, in the rooms where coal is being mined?

A. The canvas was all torn down in places where it had not been put up again. Some of it had been twisted around props and in some places ropes were twisted around props and the props were all burned and scorched in places, and powder kegs were thrown around, rent asunder; that was about the condition of things.

Q. Were there any loaded cars of coal in the 4th left entry or in any of the rooms on the day of the investigation?

A. Yes. I don't remember now whether there were and cars on the track that day or not.

Q. Well, was there at the time you went into the mine first after the explosion?

A. Yes, sir.

Q. What was the condition of that car as to being on the track or off?

A. It was off the track.

340 Q. How much does one of these cars loaded with coal weigh?

A. Coal and car weigh about 5,000 pounds.

Q. How far is that from room 16?

A. It was either in 16 or 17 room when I went through, I don't remember which now.

Q. How far was it from room 8?

A. I could not tell the distance without referring to the map.

Q. Well, measure it on the map.

A. It would be about 500 feet from room 8 if it was in 16, and if it was in 17 it was about 550 or 560 feet.

Q. Where did you find the greatest indication of explosion; in what room?

A. The greatest indications were in 16, or right in that vicinity.

Q. State what these indications were?

A. The props in these rooms were more burned than in any other part of the entry. That is the only place where we found coal dust that was coked, and at this point there at 16 or 17 is where this loaded car was moved from the track; moved several feet.

Q. From the indications which you found in these various rooms, in what direction from room 16 did the force of this explosion extend, as far as you can form an opinion?

A. It seemed to extend over as far as room 8, on the 4th left entry, and a little beyond that and in the opposite direction to the face of the 4th left entry, and returned or rebounded to the 4th left back entry.

341 Q. What, if any, indications of explosion did you find or did you know of, at the parting or at the door on the 4th left main entry?

A. I don't remember any investigations that I made there just at the present time, except what I had heard.

Q. How many of these powder kegs rent asunder, burst open, did you find?

A. Seven or eight.

Q. What was the capacity of these powder kegs, that is, what was their size?

A. They were about 8 or 9 inches in diameter and about 12 or 13 inches high.

Q. How many pounds of powder would they hold?

A. 25 pounds.

Q. What are these kegs made of?

A. Sheet iron.

Q. Where do miners keep their powder kegs when they are not using them?

A. In their tool boxes.

Q. Are these boxes kept closed or opened?

A. They are kept closed.

Q. State whether or not you found any indications in any of the rooms turned off of the 4th left entry of what is known as a "blown-out shot."

A. I didn't investigate anything on that line myself, so I don't remember at the present time anything about it.

Q. Who did make such investigation, if anybody, if you know?

Objected to as leading and suggestive. Objection sus-
342 tained. Defendant excepts.

Q. State whether or not you were in room 8 at the time you went into the mine subsequent to the explosion or any day subsequent to the explosion?

A. Yes.

Q. State whether or not you found any marks or indications in room 8 showing that a fire boss had been in that room prior to the explosion?

A. I saw fire boss's marks in the room.

Q. Where did you find these marks and what were they?

A. These marks were about six or seven feet below the last cross-

cut, is my remembrance of it. I think there is a double cross; they seemed to be slightly blurred or blotted out at the time.

Q. When was it that you saw that mark, on what day?

A. About a week after the explosion with the coroner's jury.

Q. State whether or not there were any ties or railroad track in room 8 when you made this inspection, when you were there with the coroner's jury?

A. Yes, sir.

Q. Where were they?

A. There was tracking and ties directly opposite the last cross-cut. That is all that I remember just at the present time. I know there was track there because we went in there through the last cross-cut from room 9 to 8, and I remember seeing track there, and that is all I remember now.

343 Q. Now, point out on the map, Mr. Duggan, the point above the last cross-cut where you found that fire boss's signal?

Mr. FIELD: Objected to because he didn't testify that it was above the last cross-cut; he said below.

Objection sustained. Defendant excepts.

Q. Where was it that you found this fire boss' mark in room 8 when you were there with the coroner's jury? It appears from the stenographer's notes that you said *below* the last cross-cut.

A. Well, that is my remembrance of it now; that is what I remember now.

Q. Well, are you positive that that is the place where you found——

Objected to as cross-examining his own witness.

Q. What, if you know, Mr. Duggan, was the working condition of this property on the day of the explosion and for a month prior to the day of the explosion?

A. It was good.

Q. Now, when you went into room 8 after this explosion was over, how far up into room 8 did you go?

A. I went right to the face of the room.

Q. Will you please tell me how far below the cross-cut which you entered from room 9 going into room 8, the curtain or brattice is tacked up or was tacked up at that time when you went in with the coroner's jury?

344 A. I don't remember just now. I know how much it should be.

Q. Well, how much should it be?

Objected to. Sustained. Defendant excepts.

Q. What time was it customary for the men working in the White Ash mine on the day shift to go to work?

A. Between 6.30 and 7 o'clock in the morning.

Q. What, if any, instructions, would the miners receive in going to work in the White Ash mine, from any individual charged with that duty before they were permitted to go to work?

Mr. FIELD: Objected to because there is no foundation laid to ask this witness any such question as that and because it calls for hearsay.

Objection sustained. Defendant excepts.

Q. Do you know whether men were allowed to go into the White Ash mine and work in any part of it until they were permitted to go by the fire boss?

A. Yes, I do.

Q. Were they allowed to go to work until they were permitted to go by the fire boss in the morning?

A. No, sir.

Q. State whether or not it was part of the fire boss's duty to advise the persons going into the mine as to the condition of the property and of the place where the individuals were going to work.

345 A. It was the fire boss's duty to advise each man of the condition of his place.

Court adjourned until 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. Mr. Duggan, do you know how much coal was mined in the White Ash mine during the months of December, January and February, 1897?

A. Yes, sir.

Q. How much was mined in December?

A. A little over 12,000 tons.

Q. About how much was mined in January?

A. Something over 12,000 tons.

Q. And how much in February?

A. A little over 12,000 tons.

Q. In which one of these three months was the most coal mined?

A. I think there was a little more in February, but a very little; probably a couple of hundred tons.

Q. How much was the average daily product of coal from the White Ash mine during these three months, if you know?

A. Six hundred or 700 tons a day.

Q. Can you state when it was that the work was mostly prosecuted on the left side of the mine during the month of February?

A. I don't know that there was any difference in the month of February; probably worked with the same rate in the first part of the month as it was in the last part as I can remember.

Q. Well, which side of the White Ash mine was being worked and which side was not being worked at the time of the explosion?

346 A. Everything on the left side of the mine from the 2d left down inclusive was being double-shifted, and everything on the right side of the mine was abandoned with the exception of a few men working in the 2d right. I think there was some men working in the 5th and the 6th right.

Q. Was the mine working a double shift during the month of December, 1894?

A. All the entries were double-shifted in December.

Q. And in January how was it?

A. They were being double-shifted then with the exception of entries that were abandoned on the right side.

Q. In the passage of the air through the mine, Mr. Duggan, at what point in its course to the various air courses and rooms and towards its place of exit at the fan would the air be charged with the greatest percentage of impurities?

A. Well, that would be owing to the amount of air at that point.

Q. Well, would the percentage of impurity be greater or less at the foot of the main slope than it would at the face of the 4th left entry?

A. The percentage of impurities would be greater at the face of the 4th left entry.

Q. Would the percentage of impurities be greater or less at the face of the 4th left entry than at the face of the 3d left entry?

A. The percentage would be greater at the face of the 3d left assuming that the same amount of air was going there as there was at the face of the 4th left, that is, in proportion.

347 Q. Then what have you to say as to the percentage of impurities in the air on its way to the fan than at any point in the 2d left and at the face of the 4th left entry? Would it be greater or less in the 2d left than it would at the 4th left face?

A. Why, the percentage of impurities would be greater at the 2d left.

Q. Can you state what the capacity of the sump in the 7th left was?

A. No, only approximately.

Q. Well, to the best of your ability, give us the capacity of that sump?

A. Well, I can simply state the size we generally made them.

Q. Well, can you testify with reference to the size of that one in the 7th left?

A. No, I could not.

Q. With reference to the operation of coal mines of the character of the White Ash, I will ask you now, whether or not you are able to state whether the stoppings in the various cross-cuts were or were not of the kind accustomed to be used and placed in mines of that character for the purpose of carrying air around to the face of the working places?

Mr. FIELD: Objected to because no proper foundation has been laid for the purpose of asking this question of this witness, it not being shown that he ever saw the inside of any other coal mine in his life except the White Ash mine.

Objection overruled. Plaintiff excepts.

A. Yes, they were.

348 Q. I will ask you, Mr. Duggan, what were your entire duties in your position as superintendent of that property, not only in connection with the White Ash mine, but of all the business there of the defendant company?

A. I had in charge all the three coal properties there and the coke ovens at Waldo station. It was my duty to look after the business of the entire work there.

Q. Did or did not, Mr. Duggan, a proper manner of conducting the White Ash coal mine neccessitate air stoppings in cross-cuts between rooms?

A. No, sir.

Q. Did or did not, Mr. Duggan, a proper method of conducting the White Ash coal mine and the circulation of air in that coal mine, require air-tight stoppings in the cross-cuts between the main and back entries?

A. Why, not absolutely air-tight.

Q. I will ask you whether or not during all the time you were superintendent of that property, prior to the explosion, you familiarized yourself with the underground workings, with the general conduct of the mine underground, the places where gases were apt to be generated in the mine and generally as to the proper operation of the property?

A. Yes, sir.

Q. Did you do that?

A. Yes, sir.

That is all.

349 Cross-examination:

Mr. FIELD: We wish to insist that the witness should now be exhausted as to all matters of defense in chief, now known to counsel, before we commence our cross-examination.

Mr. TWITCHELL: I will state that owing to the information stated in a telegram last night, one of our witnesses would not be here until the noon hour, and there are some matters with reference to working days in the mine and with reference to days of work performed by individuals, and with reference to the services performed by plaintiff's intestates, it is impossible for me to ask these questions from Mr. Duggan at this time.

Mr. FIELD: If it is entirely disconnected with the subject-matter of the present investigation we have no objection.

By Mr. FIELD:

Q. I understand that you give it as your opinion that at the moment of the explosion in the White Ash mine on the 27th day of February, 1895, the mine was in good working condition?

A. Yes, I do.

Q. You think then that that explosion is entirely consistent with the proposition that everything inside that mine was in first-class condition?

A. Things may be in first-class condition in a mine and an explosion take place.

Q. And it is today your opinion with all of the knowledge which you have acquired since that explosion, including the results
350 of your investigation made immediately after the explosion, that at the time of the explosion, at the moment of the explosion, the mine was in good working condition?

A. Yes, I do.

Q. And nothing that you have ever seen has had the slightest tendency to shake that conclusion of your mind as an expert?

A. I have seen nothing to indicate but what the mine was in a good condition.

Q. You are an expert superintendent of coal mines, aren't you?

A. I don't know where you got that information; I never said so.

Q. Well, are you or are you not an expert superintendent of coal mine-?

A. I don't know that I am compelled to answer that question, sir. I never assumed that I was an expert.

The COURT: Answer the question.

A. I say that I never assumed that I was an expert.

Q. How many years had it been at the time of your appointment as superintendent of the White Ash mine since you were underground in any kind of a mine, Mr. Duggan?

A. Why, about a year.

Q. Didn't you testify upon the last trial in this case that at the time of your appointment as superintendent of the White Ash mine you had not been underground in a mine for 7 or 8 years?

A. No, sir, I did not; I testified that I had not been into a coal mine in 7 or 8 years.

351 Q. Had you ever worked in a coal mine in your life, at the time of your appointment as superintendent of the White Ash mine?

A. I worked at coal mines, but not inside.

Q. What experience, had you had underground in a coal mine, practical experience, at the time of your appointment as superintendent of the White Ash?

A. I never mined coal before I was appointed superintendent.

Q. At the time of your appointment as superintendent of the White Ash mine had you ever taken a safety lamp and gone into a coal mine to inspect it for gas?

A. No, sir, I did not; and you can find miners that worked in coal mines for 30 years that had not done so either.

Q. Did you understand that I was inquiring about the experience of other people in coal mines, Mr. Duggan?

A. No, sir, I do not.

Q. Then, sir, kindly confine yourself to an answer to the questions that I propound to you. It is your experience that I am after now and not anybody else's. At the time of the explosion in the White Ash mine, on the 27th day of February, 1895, had you ever in your life inspected that mine or any other mine with a safety lamp for the purpose of detecting the existence of gas?

A. Yes, I did.
Q. How many times?
A. Several times.
Q. How many?
352 A. I say several; it may be one, two or three, it may be more.
Q. You can't tell whether it was one, two, three, or more times?
A. No, sir, I can't.
Q. What mine was it that you so inspected?
A. The White Ash mine.
Q. What part of the White Ash mine?
A. The entire mine that was accessable.
Q. Did you find any gas?
A. No, sir, not of any consequence, except little feeders in the corners.
Q. Who was with you when you made these inspections for gas?
A. The foremen of the mine.
Q. Who was the foreman?
A. John Donohue was one and Edward Flynn was another and John Ellsworth was another. I never made any inspections with him.
Q. When was Flynn foreman of the mine?
A. He was there probably from 5 to 8 or 9 months previous to the explosion, I think.
Q. How many inspections did you make in company with Flynn for gas?
A. I don't remember. I could not tell with the exception of going around with him.
Q. Did you ever in your life, Mr. Duggan, attempt to inspect any portion of the White Ash mine for gas unless you had along with you at the time some experienced man who knew about gas?
A. Why, I say the foreman was with me.
Q. Your experience in coal-mining prior to your appoint-
353 ment as superintendent of the White Ash mine was confined entirely to working a diamond drill prospecting for coal, was it not?
A. Yes, that is my experience in connection with coal mines; it was principally that.
Q. If you have had any other practical experience I want you to tell us about it?
A. Not with the exception of being in coal mines and doing drill-work around coal mines.
Q. How many coal mines had you ever been in in your life at the time of your appointment as superintendent of the White Ash?
A. I distinctly remember of being in three.
Q. Were they gas-y mines?
A. I think one of them was.
Q. Did you see any gas in any one of them?
A. I don't remember now whether I did or not.
Q. When was it with reference to your appointment as superin-

tendent of the White Ash mine, that you had been in these three other mines?

A. The first mine that I was in was in the fall of '82, in Danville, Illinois.

Q. What were you doing there?

A. I was putting down some drill-holes for a coal company at that point.

Q. How long were you in that mine?

A. Oh, just took a trip in there; I don't know.

Q. How far down in the mine did you go?

A. It was a drift mine; I carried in the level some distance.

Q. Now, where was the next one?

354 A. The next one was in Fort Bayne, Alabama.

Q. When was that?

A. That was about seven or eight years previous to the explosion.

Q. What were you doing there?

A. Prospecting for coal for the Fort Bayne Coal and Iron Company.

Q. Was that a gas-y mine?

A. No, sir.

Q. How far into that mine did you go?

A. Only went in about 200 feet; the mines were just being developed at the time.

Q. Then where was the next one?

A. The next one was the Mary Lee mine in Birmingham, Alabama.

Q. When was that?

A. That was about the same time, a few months later.

Q. How far into that mine did you go?

A. I think I went down the entire distance of that slope, I don't remember how deep it was; it was pretty deep; and went into the rooms and entries, etc. It was a pitching vein of the same pitch about with the White Ash, as I remember, probably a little more.

Q. How long did you stay in that mine?

A. I don't remember; I might have been in there a couple of hours, maybe.

Q. Was that a gas-y mine?

A. I think there is some gas being generated there.

Q. Did you see any?

355 A. No, I did not.

Q. Then, if I understand you, Mr. Duggan, at the time of your appointment as superintendent of the White Ash mine, you had been underground in coal mines in your life, all told, as much as 6 or 8 hours?

A. Maybe that, a little more or less, probably.

Q. What were your duties as superintendent of the White Ash mine?

A. My duties were to see that the entire work was properly conducted.

Q. Are you a man of such education and capacity that you could

make a map such as is on the blackboard here, of the underground workings of the mine?

A. No, sir.

Q. Did you ever see this book which I hold in my hand, Exhibit "B"?

A. Yes, sir.

Q. State what it is.

A. It is the contract book which the miners of the White Ash mine signed up to May, 1896.

Q. When did it begin, do you know?

A. I think it was in May, '93, a few days before my time.

Q. It is headed "Cerrillos Coal Railroad Company, Los Cerrillos, New Mexico, 5–6–'93, rules and regulations governing the White Ash mine," and the written part of it prior to the signature winds up "That the undersigned agree to and accept the foregoing rules and regulations for the term of three years from April 1st, 1893," is that what it is?

A. Yes, sir.

356 Q. It was a part of your business as superintendent of that mine to know that the mine was in good working condition, wasn't it?

A. Yes, it was.

Q. Did you know at the time of this explosion that the 4th left air course of that mine was obstructed with water and that that water had reached a point within three inches of the roof on the lower side of the air course and extended 200 or 300 feet along the air course?

A. I knew that there was some water in there for several weeks previous to the explosion, but no such quantity as you mention.

Q. How long had you known that there was water in that air course?

A. For at least 3 or 4 months.

Q. Did you know that there was a syphon pipe provided by that company for the purpose of syphoning out that water?

A. Yes, sir.

Q. Do you know when that syphon pipe ran last before the explosion?

A. No, sir, I do not.

Q. You don't think or didn't think it was a part of your duty to know whether that syphon pipe ran or not?

A. If I knew that the air course was all right and not obstructed enough to interfere with the air, it didn't make any difference whether I knew that the syphon pipe ran at any certain times or not.

357 Q. If you knew that there was water in that air course, did you think that you performed your duty as you understood it, if you made no effort to find out how much water there was there, as long as you were satisfied that the air course was all right as you express it?

A. If it was known that there was water there to interfere with the air it would have been reported to me.

Q. If there was water there which did interfere with the air wasn't it your duty to know it without any report to you?

A. It was not my duty to go right into the mine any particular place and investigate every little piece of detail work. I had men under me for that purpose.

Q. If there was water there which did interfere with the air wasn't it your duty to know it without any reports to you?

A. I don't think it was my duty to know.

Q. Was it anybody's duty to know if there was water in that air course which obstructed the free circulation of the air?

A. Yes, it was.

Q. Whose duty was it?

A. It was the foreman's duty.

Q. You mean John Donohue's?

A. Yes, sir.

Q. Now, if he knew it, what was it his duty to do in connection with it?

A. It would be his duty to have it taken out if he knew it interfered with the air.

Q. Well, then, it would not be his duty to report it to you?

A. Yes, sir.

358 Q. It would be his duty to report it to you?

A. Yes, it would.

Q. And then, what would be your duty?

A. It was my duty to instruct him to have it taken out.

Q. Was it not your duty personally to see that it was taken out, as you understood your duty?

A. If I instructed him to take it out I would find out immediately after the lapse of a certain time whether he had done it or not, and then I would investigate it if I found that there was not sufficient done to make the entry in a good safe condition.

Q. And, notwithstanding the fact that you knew that there was water in that air course for three or four months before the explosion, you never said anything to Donohue about it?

A. In what respect?

Q. In any respect.

A. There was water always in there. There was water in nearly all the air courses of the mine, more or less.

Q. Well, now, do try and answer this question, Mr. Duggan. Notwithstanding the fact that you knew that there was water in the 4th left air course for three or four months prior to the explosion, you never said a word to Donohue about that particular water in that particular air course?

A. I didn't say anything to him about that water any more than any other water, for the simple reason that I knew there was always a certain amount of water in there; there was a low place in there.

359 Q. And he never said anything to you about it?

A. No, sir, he did not.

Q. And you never inquired whether the syphon ran or not within those three or four months, did you?

A. I knew it had run inside of three or four months.

Q. Well, when did you know of its running last before the explosion?

A. I don't remember.

Q. You didn't see it running within a month before the explosion, did you?

A. I might have and I might not.

Q. Well, you don't know that you did, do you?

A. I don't remember, I might and I might not.

Q. Do you remember seeing it run after the 1st day of January, Mr. Duggan?

A. I don't remember now when I saw it run, with the exception that it was within probably three or four months, but I knew I had seen it running during that time.

Q. But you think that you did all that your duty required of you as you understood it, with reference to the water in the air course?

A. Yes, I know I did.

Q. Now if you had information that there was a body of water in the air course sufficient to obstruct the proper circulation of the air in that mine, what would you have done about it?

360 A. As I said before, I would have instructed the foreman to have it taken out.

Q. And you would have seen that he followed your instructions, would you not?

A. Yes, I would.

Q. You told Donohue at the time that you employed him that it was his business to keep the mine free from water and the air courses free from obstruction, did you not?

A. Yes, I did.

Q. Well, if he didn't keep the mine free from water and the air courses free from obstruction, he didn't do his duty, did he?

A. I don't know whether he did, but that is the condition that the mine should have been kept in.

Q. You testified on the former trial of this cause as follows, didn't you, Mr. Duggan: "Q. You told Donohue at the time you employed him, you testified on your direct examination, that it would be his business to keep that mine free from water and the air courses free from obstruction. If he failed to do that he failed to do his duty, did he not, Mr. Duggan?" To which you answered: "A. Why, he did, if he did so without reporting it to me." And then you were asked the question: "Q. Did he report to you that the 4th left air course of that mine was obstructed with water?" To which you answered: "A. No, sir." And the question was: "Q. Then in that regard he failed to do his duty?" To which you answered: "A. Well, if I understand the question right, if the air course was obstructed with water, and it was kept in that

361 condition, and he failed to report that to me, he did not do his duty." Did you so testify upon the former trial?

A. I think I did testify something to that effect.

Q. Well, that was entirely true as you understood it?

A. Well, if he knew that the air course was obstructed with water, I think he would have failed to have done his duty.

Q. Did you know that on Sunday night before the explosion gas was discovered in room No. 8 of the 4th left entry of that mine, extending across the face of the room and 10 or 11 feet down from the face?

A. No, sir, I did not.

Q. Was it or not a part of your duty, as you understood it, to know that fact, if it was a fact?

A. If it was a fact it would be my duty later on. It would be not my duty to know it right instantly when it was discovered.

Q. Well, if it is a fact, that one of the fire bosses in that mine on Sunday night before the explosion discovered a body of gas in room No. 8 of the 4th left entry, which body of gas extended across the face of the room and down into the room 10 or 11 feet from the face, tell this jury what was your duty and what was the fire bosses' duty and the foreman's duty with reference to that body of gas, as you understand these duties?

362 A. It would be the duty of the fire boss right at that time to move the body of gas and report the thing no further just at that time until he did that.

Q. And then it would be nobody else's duty to do anything about it?

A. I say at that time it was his duty to do that first, to move the body of gas when there was nobody in the mine but himself.

Q. And if he failed to move that body of gas at that time he failed of his duty, did he not, Mr. Duggan?

A. It would be owing to the circumstances and conditions there.

Q. Then I understand you that it was not his duty to move the gas; that circumstances or conditions might have excused him from the performance of that duty?

A. It might have delayed him.

Q. If it would delay him in the performance of his other duties——

A. I don't mean in that respect.

Q. Wait until I ask the question. If it would delay him in the performance of his other duties in that mine he might, you think, failed to remove that body of gas and yet not fail in his duty?

A. A fire boss may go there and might be unable to move this by himself, if he found a dangerous body and might not have always wanted to undertake it alone and would wait for assistance. That is why I say that if he could not do it instantly the matter would be delayed until he got some assistance.

363 Q. Such a body of gas as is contemplated in my question is in your opinion a dangerous body of gas, is it not, Mr. Duggan?

Q. I would have to know something about the entire dimensions of the gas to know whether it was dangerous or not.

Q. Suppose the gas as described by the fire boss is a body of gas extending across the face of room 8, and down 10 or 11 feet from

the face in the room. Can you from that description determine whether or not it was a dangerous body of gas?

A. Yes, I can.

Q. Well, state whether it was a dangerous body of gas.

A. I would consider it so.

Q. Now, then, as I understand you, if the fire boss discovered such a body of gas, it was his business to move it, if he could before he did anything else?

A. Yes, that was his duty.

Q. And if he could not do it without assistance to get assistance?

A. Yes, sir.

Q. And then remove it as soon as practicable?

A. Yes, sir.

Q. Now, if he neither removed it himself, nor got any assistance, nor made any effort therefor, before the explosion, to remove that gas, he was guilty of a flagrant violation of duty, wasn't he, Mr. Duggan?

A. Well, if the conditions were such as you state, and all the facts, he did not do as he should do, not if I knew it.

364 Q. If when he discovered that body of gas he marked a tie with a double cross and the words, "fire," "danger," and his initials and the day of the month and threw the tie down on the railroad track above the last cross-cut, and reported to the foreman that he found a little more gas than usual in room No. 8 that night, and did nothing more about the matter, and did not go back to the fire-mark again before the explosion; did he or did he not, in your judgment, discharge his duty with reference to that gas?

A. Well, as I say, unless some conditions or circumstances existed that I don't know anything about, he would not have done his duty.

Q. Now, if after the report by the fire boss to the foreman of the existence of this gas, no effort was made by the foreman to remove that gas between the time he received this knowledge of its existence, this report of its existence and the explosion, did the foreman do his duty?

Mr. TWITCHELL: Objected to as improper cross-examination and as being a hypothetical question not based upon any facts in evidence with reference to whether or not the foreman had taken any steps to take the gas out of room 8. Furthermore, the presumption obtains that the foreman did perform his duty.

Q. I will change the form of the question, saying, "the foreman did not remove the gas," instead of saying, "no effort was made."

Mr. TWITCHELL: Same objection.

Objection overruled. Defendant excepts.

365 A. If the fire boss reported a dangerous body of gas to the foreman, why he should have had it removed.

Q. And if he didn't have it removed, he did not do his duty?

A. I don't suppose he did do his duty.

Q. Now, Mr. Duggan, if, on the next inspection of the mine on

Monday morning before the explosion the other fire boss went into that room and discovered a body of gas in room 8 and marked it with the fire-mark, but did not see the fire-mark—Mr. Clancy calls my attention to the fact that I have located the time of that inspection a few hours out of the way. If that first inspection to which this previous question referred and the first discovery of that gas was made on Monday morning instead of on Sunday night, your answer would be the same, would it not?

A. Yes, sir.

Q. If on Monday night before the explosion it would be when the inspection was made of the mine for the men to go in on the night shift, the Monday night shift, now, if at that inspection the night fire boss went into that room 8 and discovered a body of gas, but did not discover the fire-mark of the day fire boss and he put two fire-marks, one above the last cross-cut up towards the face of the room and the other below the last cross-cut, down towards the neck of the room, and he reported to the foreman that he found a little more gas in room 8 than usual and he did not go back to his fire-mark or again go in and inspect that room for gas before
366 the explosion, although he continued to inspect the mine for his shift, did he or did he not, in your opinion, perform his duty with reference to that body of gas?

A. No, he did not perform it fully.

Q. Ought he not to have removed the gas?

A. It ought to have been removed when it was first discovered.

Q. And if it was not removed when it was first discovered it should have been removed when it was next discovered, should it not, Mr. Duggan?

A. Yes, it should.

Q. Now, if you had known of the existence of the body of gas which I have described to you, in room 8, of the 4th left entry of that mine, discovered on Monday morning and still there so far as anybody knows, at the time of the explosion, what would you have done about it?

A. I would have had it removed.

Q. If you had known, Mr. Duggan, in your capacity of superintendent of that mine, that on account of the accumulation of water in the 4th left back entry of that mine, the fire boss had not gone through there for more than a week, what would you have done about it?

A. Well, it would be owing to the extent of the portion of the entry that the water covered.

Q. Well, if you knew, say, that two or three hundred feet of the entry that the fire bosses were not going through on account of the water, for as much as a week before the explosion, would not you have had it removed?

A. Yes, I would.

367 Q. You understand the system of air measurement which was used in that mine?

A. Yes, sir.

Q. Do you know whether or not, in measurement of air which

goes into the mine, and air which comes out of the mine, you should get more air at the place of entry or at the place of exit?

A. Generally get a little more at the place of exit.

Q. Why is that?

A. It is owing to the temperature in the mine and outside; the difference in the temperature.

Q. Owing to the expansion of the air by heat?

A. Yes, sir.

Q. Well, if that is true, Mr. Duggan, why is it not conversely true that you get more air coming out of the mine than you get going in?

A. Sometimes the temperature in the mine may be cooler than it is on the outside.

Q. Take in the months of December, January and February. Do you think the temperature of the mine at that time would ever be cooler than the outside temperature?

A. No, sir.

Q. Then should you not, Mr. Duggan, in the months of December, January and February, get more air coming out of the mine then you get going in if the air passages are all right?

A. Yes, sir.

Q. Can you tell the jury why it was that when you measured the air going into the mine on the 23d of February, you got
368 28,700 feet of air going into the mine and only 24,668 feet coming out?

A. No, but the reason might be that the intake of the air was taken in one measurement, while the return was taken at two different points, and I think there was one point omitted at that time inside the first right. There is the return on the right side, coming in, two places, and on the left side it only came in in one place through the overcast.

Q. Might not another explanation be that there was some check in some air course?

A. That would not make any difference.

Q. It would come out just the same, would it?

A. If there is 28,000 feet of air going into that mine there would be about that much coming out over the fan.

Q. No check in the air course would affect that matter at all?

A. It might shake it slightly, but I don't think it would make that difference.

Q. But it might?

A. It might, some.

Q. The exhaust capacity of that fan was what did you say on your direct examination?

A. It is about 40,000 cubic feet a minute.

Q. That is the extent of the capacity of the fan, is it?

A. That is the capacity of the fan, what the manufacturers of the fan placed it at.

Q. Well, the air coming out of that mine has measured more than that many feet, has it not?

A. You mean at different times?

369 Q. At one time. Don't you know of a time when the air coming out of that mine as measured exceeded the capacity of the fan, as you stated?

A. Why, that might be so.

Q. How would you account for that, Mr. Duggan?

A. Well, if the capacity of the fan was $4,000 cubic feet per minute you might get a larger capacity than that for a certain length of time, but it would not be practicable to keep it up permanently on account of the wear and tear of the machinery.

Q. That fan did not have any capacity to pull more air out of that mine than went in, did it, Mr. Duggan?

A. Except the difference in expansion.

Q. And if there was only 20,000 cubic feet of air a minute going into that mine there could not any more air than that come out that way beyond the expansion by heat so as to measure more, but it could not in fact be any more, could it?

A. No, sir.

Q. When you measured the air in the mine on the 23d day of February, as I understand you, you took the measurements when the doors were all closed and everybody was out of the mine as far as you knew except yourself and the foreman, and on that measurement you got 28,700 feet per minute going in at the main slope, is that so?

A. Yes, sir.

Q. Was the fan running to its full capacity at that time?

A. No, sir.

370 Q. Why not?

A. We ran the fan according to the amount of air that was required in the mine.

Q. At what velocity was the fan running when you took that measurement on the 23d of February?

A. I think it was 75 revolutions per minute; that is my remembrance of it.

Q. That was the velocity at which the fan habitually ran, wasn't it?

A. Yes, up to that time.

Q. Now, Mr. Duggan, if the fan was running as usual, and all the doors in the mines were closed, and there was nobody in there, why was it, that you did not get as much air on the measurement going into the mine as you did when you measured it on the 9th of February?

A. For the simple reason that when I took the measurement on the 23d day of February all the trap-doors in the mines were closed and the entire amount of air going into the mine had to make the full circuit of the air course from the mouth of the slope to the foot of the slope, and the measurement I took the 9th of February was taken while the mine was being operated, and the trap-doors, were being opened and shut almost constantly and for instance there you can see where on the first right I got 20,000 cubic feet per minute on the 9th of February, and immediately after taking that measurement I knew that there was some trap-door opened and I

sent the foreman down to the 1st right or the 2d right—I don't remember which—and he found that door partially left opened,
371 which increased the air from 12,000 or 13,000 cubic feet per minute, what we should get there being about 20,000 cubic feet per minute.

Q. Now, as I understand you, when the mine is at work and the doors are being opened and closed, you should get more air with the same power at the fan, coming into the mine than you would with the place all closed and the mine not at work?

A. The capacity of the fan would be greater with a shorter length of air course, shorter return.

Q. Which would give the shorter length of air course, the mine in operation or the mine not in operation?

A. The mine in operation.

Q. Then you should have more air when the mine is in operation than when the doors are all closed and the mine is not in operation?

A. You would get larger air measurement at certain places.

Q. You would get larger measurement at the intake for instance?

A. Yes, sir.

Q. You would get larger measurements at the exhaust?

A. Yes, sir.

Q. How would it be at the foot of the slope?

A. It would be inclined to be less.

Q. You think that the proportion of the air at the foot of the slope should be less with the mine in operation than with the mine closed?

A. Taken on the average it would, say in ten hours there
372 would be more air at the foot of the slope in ten hours with the mine not in operation than it would when in operation.

Q. What becomes of the air that goes in at the main intake and does not go to the foot of the slope? It goes to the fan by the shortest route, does it not?

A. Yes, sir.

Q. On the map point out how it goes there.

A. Any air that went into the mine from the intake here and did not go to the foot of the slope, it would reach the fan through leaks on this side up to the return or union here, and it would reach the fan through leaks on the left side on the short return to the overcast.

Q. On the 23d of February, when you took that air measurement you got 28,700 feet of air a minute going into the main slope, and only 14,580 a minute at the foot of the slope before the split. That shows that 14,120 cubic feet of air per minute was leaking in that slope and returns to the fan by a shorter course, does it not?

A. Yes, sir.

Q. Do you think that a leakage of air in the main slope of the mine approximated 50 per cent. when the doors were all shut and the mine not in operation discloses a satisfactory condition of the air courses of the mine?

A. It is satisfactory if there is sufficient at all the working places and keep the mine in good condition.

Q. I want to know if in your opinion as a mining superintendent the fact that the air measurements taken on the 23d day of
373 February with the doors all closed and the mine not in operation, which measurements showed that almost 50 per cent. of the air supplied to that mine was being lost in the main slope before the split, if that, in your opinion, discloses a satisfactory state of the air courses of that mine?

A. Well, knowing the conditions of the mine and the amount of air required, I considered it all right.

Q. In other words, then, you considered a slope which will leak 50 per cent. of the air supplied to the mine as a perfectly good slope, sufficiently air-tight for the purposes of mining?

A. It would be owing to the conditions of the mine altogether.

Q. Well, how would it be, Mr. Duggan, if a slope was leaking more than 65 per cent. of the air which went into it? Will it still be a good slope in your judgment, sufficiently air-tight?

A. Well, I could not say about that; it would be owing to the conditions altogether.

Q. Is there any point of leakage in the main slope of the mine short of 100 per cent. which you would say indicated a bad slope, an insufficient slope?

A. I know that it is the theory that in this plan of ventilation in a slope of that depth at least 30 per. cent. of the air is lost before it reaches the foot of the slope.

Q. Now, how much more than 30 per cent. must be lost before you as a mining superintendent would pronounce the slope insufficient?

374 A. It would be owing to the amount that was going to the faces and the condition of the mine.

Q. If 90 per cent. of the air was lost you would not still be willing to pronounce the slope bad or insufficient, would you?

A. Well, if there was 90 per cent. lost I presume it would be bad.

Q. How would it be if it were 80 per cent.?

A. I would consider it bad.

Q. How would it be if it were 70 per cent.?

A. It would not be very good.

Q. How would it be if it was 65 per cent.?

A. That would be owing to the conditions required at the faces.

Q. Did you know, Mr. Duggan, that for ten days to 2 weeks before the explosion there was an opening from the return air course to the upper air course leading to the plane on the 4th left, whereby air went to the men on that plane and thence to the 3rd left without going to the other working places?

A. No, sir, I knew of no such opening.

Q. If such an opening were made by the fire boss under the direction of the mine foreman, should it have been reported to you?

Mr. TWITCHELL: Objected to as improper cross-examination, and

as being a hypothetical question based upon facts not testified to by the witness or anybody else.

Objection sustained. Plaintiff excepts.

Q. You appointed John Donohue foreman of the White Ash mine, didn't you?

375 A. Yes, sir.

Q. Do you know whether he had ever been foreman of a mine before or not?

A. Not to my knowledge.

Q. Mr. Duggan, you have testified upon your direct examination that after the explosion you went down into the mine and did certain things and that afterwards you went down with the coroner's jury, and they made an investigation. State, if it is not true that from the night of the explosion when the last body was gotten out until the coroner's jury went down the defendant company and you had as its representatives were in possession of the White Ash mine excluding all persons therefrom except the servants of the company?

A. Yes, with the exception of one man.

Q. What man was that?

A. That was the Government mine inspector.

Q. Did he go in between the time of the explosion and the time the coroner's jury went in?

A. I think he did.

Q. Are you sure of that?

A. No, I'm not.

Q. Well, now think it over and say if you are not sure that he did not?

A. I could not say whether he was or was not. All I know is that he was there for several days after the explosion, and had the privilege of going in at any time he wanted to.

Q. The coroner's jury inquest was going on for several days after the explosion before the coroner's jury went down into the mine, wasn't it?

376 A. I don't know, I wasn't present; I believe it was though. Oh, yes; I misunderstood the question; yes.

Q. Now, during that interim between the night after the explosion and the time when the coroner's jury went down, were not you working every man that you could work in that mine, running night and day pumping out water and putting in brattice?

Mr. TWITCHELL: Objected to as improper cross-examination, anything done subsequent and any changes made subsequent to the explosion, that time subsequent to the explosion, is certainly improper and immaterial.

Objection overruled. Defendant excepts.

Mr. FIELD: The purpose of this testimony is simply to show—and I wish the court to instruct the jury at the time that they take it, that it is for this purpose and none other—that on the direct examination this witness has detailed to the jury a condition which he found there when he went down with the coroner's jury, and this evidence is offered not for the purpose of showing changes by the

company subsequent to the explosion, but for the purpose of showing how the conditions were that the witness testified on his direct examination existed.

Mr. TWITCHELL: The same objection.

Mr. FIELD: This is not for the purpose of showing any changes that were made that would obviate like accidents in the future. We ask the court to say to the jury that evidence of what was
377 done by the defendant company between the time of the explosion and the going down of the coroner's jury is not to be considered by them as any evidence of any imperfection existing in that mine prior to the explosion, but is to be considered by them merely as throwing light upon the facts which this witness upon his direct examination testified were found there when he went down with the coroner's jury.

Objection overruled. Defendant excepts.

Mr. TWITCHELL: Before the court instructs the jury the defendant by its counsel objects to any instruction from the court to the jury with reference to any evidence from the witness following the question as propounded by counsel for the plaintiff, for the reason that the evidence given by the witness speaks for itself and that under the law the court has no right to limit the effect or weight, or comment upon the weight, of any evidence given in this case, the instructions of the court being a comment upon the weight of the evidence.

Mr. FIELD: We will confess the objection and ask the court not to say anything to the jury and let the witness answer the question.

The COURT: Very well. I will sustain the last objection and give no instructions and let the witness answer the question.

Defendant excepts.

A. We were working a force of men, both night and day, getting the mine into working condition from the results of the ex-
378 plosion between the night after the explosion and the investigation of the coroner's jury.

Q. Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?

Mr. TWITCHELL: Objected to as calling for an opinion of the witness and the facts speak for themselves.

Objection sustained. Plaintiff excepts.

Q. Well, you have not answered my question as to whether or not you were hauling out water night and day during that period.

Mr. TWITCHELL: Objected to on the ground that he has answered the question. And the same objection as being evidence calculated to call for the evidence with reference to changes made subsequent to the explosion, and not proper cross-examination.

Objection overruled. Defendant excepts.

A. We were taking out some water in connection with the other work that we did.

Q. You stated that you discovered evidences of explosion in that

mine beyond room 8 towards the slope, what were they? unless I misunderstood you.

A. All the evidence of explosion that I saw between room 8 and the slope would be some scorched props in the room and some canvas that was twisted or torn down.

Q. Scorched props in room 8? You said between room 8 and the slope.

379 A. Yes.

Q. Did you find any scorched props between room 8 and the slope?

A. I don't remember finding any.

Q. You remember finding scorched props in room 8, don't you?

A. I remember finding some that were slightly scorched.

Q. Was the last prop up towards the face scorched?

Mr. TWITCHELL: Objected to for the reason that he has not designated which last prop. In room 8 there were in all probability a number of last props. I think it should be confined to the particular prop.

Objection overruled. Defendant excepts.

A. I remember that the props up towards the face of the room were less scorched than those further down.

Q. And you also remember that there was no evidence of fire at the face of the room, don't you?

A. My remembrance is that there was very little evidence of fire at the face of room 8.

Q. Is it not your remembrance that there was no evidence of fire in room 8?

A. Well, I don't remember that it was just exactly that way, right at the face. My remembrance is that 12 or 15 feet from the face the evidence of fire was very little.

Q. And as you now remember the matter you have no recol-

380 lection of having seen any evidence of fire further up towards the face than 12 or 15 feet?

A. No, sir.

Q. In that mine you found numerous unexploded powder cans after the explosion, did you not?

A. I don't remember as to that; I might and I might not; I would not have paid any attention to those.

Q. Did you not find an unexploded cartridge at the face of room 12 set up against the coal?

A. I don't even remember having seen that there; I heard of it, though.

Q. Did you find miners' coats and dinner buckets in those rooms undisturbed by the explosion?

A. I remember of seeing in one instance a miner's dinner bucket undisturbed in one of those rooms.

Q. You remember seeing a coat that was undisturbed in one of the rooms?

A. I remember seeing coats, but I don't remember whether they were undisturbed or not.

Q. You stated upon your direct examination that in your opinion the force of the explosion went into the back entry on the rebound. Now, why do you think it went in there on the rebound, instead of going on its direct course?

A. Because that would be its direct course according to my idea of it in the rebound.

Q. I suppose we don't understand each other. Is it not your theory that this explosion went against the air?

381 A. It went against the air, and wherever the most air was it would go both ways.

Q. It is your theory that it went both with the air and against the air?

A. My theory is that the main force of the explosion went against the air, and some of the explosion would go with the air if there was a large body of air close to it, to the side of where it originated.

Q. Is it your opinion, Mr. Duggan, that the flame would depart from the air current?

A. No, sir.

Q. If there was evidence of flame in the 4th left air course before getting to the water, that is conclusive evidence, is it not, that that flame got there following the air current?

A. Yes, sir.

Q. Then, if there was any further violence exerted by that explosion, it must have been exerted after the explosion met with resistance in the 4th left air course?

Mr. TWITCHELL: Objected to as being a hypothetical question based upon the supposition that there was an obstruction in the 4th left air course, of which there is no proof.

Objection overruled. Defendant excepts.

A. My theory is that the force of the explosion went to the face of the 4th left main entry, going against the air, and it continued going against the current of air and rebounded into the 4th left back entry.

382 Q. I don't understand what you mean by the word "rebounded;" it didn't rebound as long as it was following the course of the air current, did it?

A. Well, if it didn't rebound it turned a circle or turned a corner and came around and came into the back air course of the 4th left.

Q. Now, is it or not your opinion that the force of that explosion met with an obstruction in the 4th left air course?

A. It might have met with some at the time that the force of the explosion reached there from the inside end of the back air course, for the simple reason that all the stoppings were blown out there between the back and main.

Q. Now, if it didn't meet with resistance or obstruction in the 4th left air course, would it not have gone right on down to the bottom of that mine?

A. Not necessarily so.

Q. Why not?

A. Owing to the force of the explosion.

Q. Well, if there was enough of it left to rebound, there must have been enough of it left to go on, is that not so?

A. Why, it might have expended its force before it reached the obstruction, if there was such an obstruction there.

Q. Well, if it did expend its force before it reached the obstruction there never would have been any rebound, would there?

A. There would have been a rebound if it reached the face of the 4th left main.

383 Q. Well, there was no evidence of flame at the face of the 4th left main entry?

A. I don't remember just now whether there was or not. The canvas was all torn down there.

Q. If the men who were working, the entry men in the 4th left were not scorched in any way, and there was no evidence that the flame went to the face of the 4th left entry, what becomes of your theory in your judgment, that the flame went there and rebounded?

A. Men were not found in there at the time; they were found out near the last cross-cut.

Q. Now, if one of the men was found at the entry and he was not burned and there was no evidence of fire at the face of the 4th left main entry what becomes of this theory of yours about the flame having gone there and rebounded? Do you still adhere to it?

A. The indications would be that the flame did not reach to that extreme point.

Q. What, in your opinion, caused this calamity in the White Ash mine, Mr. Duggan?

A. Well, all I know to a certainty is that I know powder exploded down there, and I know that coal dust ignited there, and I think there was some indications that some gas had been exploded. I think that there was no doubt that it was a combination of powder, coal dust, with some gas that may be in the air.

Q. Now, that theory involves the idea that there was an ignition of powder in some of the working places of the 4th left at 10.45 on the morning of the explosion, does it not?

384 A. Ignition in what way, any way?

Q. Yes; some way.

A. Yes; it might in some way.

Q. Now, that was not a regular hour for the ignition of powder, was it?

A. No, sir; it was not; but it was a time when men would be making up their cartridges and handling their powder.

Q. That theory also involves the idea that if there was an explosion of powder that there should have been such a report as ordinarily accompanies the explosion of powder, does it not?

A. Not necessarily so.

Q. You think that this might have been a powder explosion without any report? A certain quantity of powder could be confined within a certain space in order to create a report, but it has to be confined in order to create any damage too, does it not?

A. No, sir; not necessarily so.

Q. You think that unconfined powder exploded in room 16 or 17 of that mine might kill men in room 8, for instance?

A. I simply said that if powder was exploded in 16 or 17 that the force of that powder being ignited would ignite coal dust in the mine, and all of the air in coal mines is more or less impregnated with coal dust, and this coal dust would be ignited, and if there was any gas in the air in the mine, that would also be ignited if the percentage was over 4 per cent.

385 Q. Is it not absolutely true, Mr. Duggan, that what you found in that mine after the explosion conclusively convinces you that, at the time of the explosion, there was gas in room 8 of that mine and that the explosion of that gas killed the men who were killed in room 8?

A. No, sir, not by any means.

Q. You are sure that is not so, are you not?

A. I am not positive it is not so, but there is evidence, there is strong evidence that the seat of the explosion was in room 16 or 17, rather than in any other place.

Q. Now tell this jury what this stronger evidence was.

A. There is more evidence of that and props being burned and coal dust being turned into coke, and a loaded car that was moved some distance from the track, sideways, and things in general there showed more indications of force and violence than any other room in the 4th left entry.

Q. And that was evidence to your mind that that was the seat of the explosion?

A. Yes, sir.

Q. Now, let us see, Mr. Duggan, what you expect to find in a gas explosion, pure and simple, indications of the greatest heat and violence at the place where it started?

A. I have seen gas ignited——

Q. Can you answer the question?

A. I would expect to find it very close to the point.

Q. Would you expect to find it right at the place where it started?

A. Not exactly at the point, but close to it.

386 Q. Why would you not expect to find it exactly at the point?

A. Because the force would increase right shortly after it was ignited.

Q. And it would increase in violence as it traveled against the air, would it not, Mr. Duggan?

A. No, sir, not all the way.

Q. As long as it was accumulating gas and being fed by air, would it not increase in violence?

A. No, sir, not to the full extent of the force.

Q. You know all about gas explosions, do you?

A. No, I don't think I do.

Q. How many did you ever see?

A. I have seen gas ignited several times, and an explosion of gas is simply the ignition of a very large body of gas.

Q. Did you ever see an explosion of gas where human life was lost and destruction of property occur, except the one under consideration here?

A. I never experience- any others.

Q. Now, if there had been gas in 8 and 9 and 10, 11 and 12 and 13 and 14, and 15, and 16 and 17 of the 4th left entry of that mine, and the gas was ignited in room No. 8, would you not expect to see the greatest evidence of explosion and violence in 16 and 17?

A. More so than in room 8?

Q. Yes.

A. No, I don't know why I should altogether.

Q. Would you or would you not?

387 A. Well, I don't know whether I would or not.

Q. And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not so?

Mr. TWITCHELL: Objected to.

Objection sustained. Plaintiff excepts.

Mr. FIELD: I offer to prove the affirmative of the question by the witness and except to the ruling of the court.

Q. How much powder was used on the 4th left entry of that mine on the day shift when it was working a full complement of men?

A. Probably four or five kegs.

Q. Do you know how much?

A. No, sir, I do not; but it varies at times owing to the condition of the coal.

Q. It might be twice four or five kegs, might it not?

A. No, sir, I think not, not with that number of men in there.

Q. How many men?

A. There were about 24 miners working in there, I believe.

Q. How much powder would two miners use on a shift?

A. They would use from 4 to 6 pounds probably.

Q. 4 to 6 pounds each or 4 to 6 pounds both?

388 A. I say it varies. It might be both sometimes, in driving their room ahead, then they would use more powder than at other times, and in shooting off the butts they would not use so much, and also in turning rooms in room necks.

Q. For all that you know to the contrary there might have been as much as 200 to 250 pounds of powder on a shift exploded at times in that 4th left, in the regular course of mining coal there?

A. No, I don't know that there was that much.

Q. Half that much?

A. That would be my idea of it, on the average.

Q. You say you helped to take the bodies out of that mine?

A. Yes, sir.

Q. Whose bodies did you help to take out?

A. I assisted in taking out all of them with the exception of Flick

and Kelly, and I remember that I discovered one of the bodies of the Deserants, Henri Deserant, Jr.

Q. Did you find Donohue's body?

A. I don't remember whether I was with the party when he was discovered or not. I was right there when he was brought down.

Q. Did you find Kelly's body?

A. No, sir.

Q. Now, you say that there was about the same quantity of coal mined in February that had been mined in January?

A. Yes, sir.

389 Q. The same number of working days in each month?

A. I don't remember as to that.

Q. Don't you know that there was at least—counting the same working days—that there was at least 33 per cent. more coal taken out of that mine in February than there was taken out in January?

A. No, sir, I do not.

Q. Do you know it was not so?

A. I know positively that it is not so.

Q. You say that there was about 200 tons — of coal taken out in February than were taken out in January?

A. I think about that.

Q. And you say you don't know anything about the number of working days?

A. No, I don't remember now.

Q. Well, if you worked every day and took out 200 tons more of coal in less than 27 days in February than you took out in 31 days in January, that would show an increase of more than 20 per cent., would it not?

Mr. TWITCHELL: Objected to. There is no testimony here that there was 31 working days in January, nor is there any testimony that there was 27 working days in February.

Objection overruled. Defendant excepts.

A. In that respect it would be owing to the force of men working in January and working in February.

Q. (Question repeated.) Do you think men are involved in that question at all?

390 A. I think it is.

Q. What figure does the number of men cut in that question, Mr. Duggan?

A. Well, if 100 men would produce a certain quantity of coal in a certain number of days in February, or in any month, in a given time, it would be no more than reasonable to expect that double the quantity of men would produce double the quantity of coal in one-half the time.

Q. In working, as the mine was worked during the month of January, a little more than 1,200 tons of coal were produced during the 31 days of that month, and working as that mine was worked up to the time of the explosion in the month of February, 200 tons more of coal was produced in less than 27 days of the month of

February, does that not show an increase of output for February over January, day for day, amounting to more than 20 per cent.?

A. It does in proportion to the number of days worked.

Q. Did you have any record of the amount of water that was hauled out of that mine?

A. No, sir.

Q. Never did keep any record of that?

A. No, sir.

Q. Now, if anybody in authority in that mine directed the roperiders to haul water out of that mine in preference to coal, were those orders proper or improper?

A. I don't know that would be owing to circumstances and conditions.

391 Q. Well, if water was not hauled out of that mine it would certainly accumulate in the mine, would it not?

Mr. TWITCHELL: Objected to for the reason that it calls for a conclusion of this witness.

Objection overruled. Defendant excepts.

A. If water was not hauled out it would certainly accumulate if it was making water.

Q. The mine did make water, didn't it?

A. Some parts of it.

Q. You never knew the 4th left entry when it was not making water, did you?

A. I knew when it was making practically no water, you may say.

Q. Didn't that 4th left air course make water from the time it was driven?

Objected to as improper cross-examination. Objection overruled. Defendant excepts.

A. What I term it, "practically no water," would not be significant; it would be very insignificant.

Q. You thought it was insignificant at the time of the explosion, didn't you, the quantity of water that was there?

A. I didn't know of the water in any way interfering with the condition of the mine at the time of the explosion.

Q. But you took no precautions to find out whether it was or was not, did you?

A. Yes, I did.

Q. What did you do?

392 A. We had a syphon put in the 4th left back entry to take the water from there.

Q. But you did not see that syphon within a month before the explosion, did you?

A. I don't remember whether I did or not.

Q. And that is what you call taking precautions against the accumulation of water, is it?

A. There was a man under me to perform that kind of work and it was his duty to do it.

Q. But you didn't know whether he did it or not, did you?
A. I presumed that he did.
Q. But you did not know whether he did it or not?
A. Did what?
Q. Do you understand the question, Mr. Duggan?
A. I have forgotten just exactly what it is, now.
Q. But you did not know whether he did it or not, did you?
A. If he knew the water was there and interfered with the ventilation of the mine, he didn't do his duty.
Q. And if the water was there and did interfere with the ventilation of the mine, it was his business to know it, was it not?
A. Yes, sir; it was.

Court adjourned till 2 p. m.

Court met pursuant to adjournment.

393 Redirect examination.

By Mr. TWITCHELL:

Q. Mr. Duggan, you were testifying on cross-examination this morning with reference to the various servants and kind of services which you had performed in your capacity as a miner. I will ask you whether or not your duties as superintendent of the White Ash mine and the various properties located there, over which you had been placed in charge, required a man cognizant of the workings of the various kinds of machinery both on top of ground and underground, and with a varied experience in matters in connection therewith?

Mr. FIELD: Objected to as improper redirect examination.
Objection overruled. Plaintiff excepts.

A. Yes.
Q. What experience had you had in the matter of handling machinery and things of that kind?

Same objection. Objection overruled. Plaintiff excepts.

A. My experience in handling machinery; I fired steam-boilers, operated steam-engines, I have learned the machinist's trade, I have went to a drawing school at night; I put in large Cornish pumps into mines and what is known as "drawing lifts" in mines, and operated diamond-drill machinery.

394 Q. You testified this morning that you could not make a map like that (referring to map on blackboard). I will ask you if in the operation and conduct of the White Ash mine you had anybody under you who could make such a map?
A. Yes, sir.
Q. Who was he?
A. J. C. Porterfield, M. E.
Q. Was he the same Mr. Porterfield who testified in this case last week?
A. Yes, sir.

Q. This morning in your testimony you identified this book, Exhibit "B," as the contract book signed by the miners, beginning with the 6th day of May, 1893, up to May, 1896. Is this the book that you identified this morning?

A. Yes, sir.

Mr. TWITCHELL: I will offer so much of this book in evidence as contains the rules and regulations or what purports to be the rules and regulations regarding the White Ash mine and the two signatures of the Deserants, the same as in the last trial. I have forgotten the last page.

Mr. FIELD: We offer the balance of the names up to the 27th of February, 1895.

Exhibit "B" as read to the jury is as follows, to wit:

395 CERRILLOS COAL R. R. CO.,
LOS CERRILLOS, N. M., 5, 6, '93.

Rules and Regulations Governing the White Ash Mine.

To employés:

This company in starting its work up, desires all persons whom it may see fit to employ to understand that it will do all in its power to protect them in their just rights, that it will treat all employés with square and exact justice, and do everything in reason to advance the prosperity and happiness of its employés. To this end it will discourage all drunkenness and other demoralizing influences. It will not knowingly employ bad men, who are continually getting up strikes and dissatisfaction among employés, or threatening the lives and property of peaceable citizens, and will discharge all such from its employ as soon as found out. In order that there may be a full and complete understanding between the company and its employés, the following rules and regulations are hereby agreed to, and adopted by the company, for the government of its mines. Its superintendent and other officers are hereby commanded to enforce them in such a manner as to secure equal justice to all concerned.

1. *Favoritism.*

396 No officer or other responsible person will be permitted to have favorites, or show favoritism to any person or persons in the mines. Every person is expected to stand or fall on his own merits, and any officer having favorites must dispense with them or resign his position.

2. *Committees.*

No mine committee, or pit committee so called, will be allowed to interfere in any manner with the operations of the mines, or any matter pertaining thereto. Any employé having a grievance, or any other matter, to settle with the company is expected to go to the pit boss and superintendent, and settle it in a manly way. The

company wants no employés who are slaves to any committee, or who dare to not ask for their just dues like men.

3. *Employing Men.*

No person or persons whether employed by the company or not, will be permitted to dictate who shall be employed or discharged or to interfere in any way or manner in such matters. The company has secured the services of experienced mining superintendents, who will deal justly with men employed, who will give gentlemanly treatment to all, and expect the same in return.

4. *Prices for Dead Work.*

397 The superintendent and the pit boss will fix the prices on dead work by agreement with the parties doing the work, and such decisions shall be final.

5. *Turn of Pit Cars.*

No discrimination will be made among miners in the handling of their coal. Each and every miner shall have his turn of the cars as fast as he can take and fill the same, provided that he can furnish; miners shall not interfere with each other in their rooms or entries as to the quantity of coal they shall get out, but each miner will attend to his own place and get all the coal he can.

6. *Preparing Coal.*

Miners will be required to send out coal free from dirt, slate, rock, or bone, so prepared that twenty-four hundred (2,400) pounds of "run of mine" shall yield two thousand (2,000) pounds of screened coal. In case this article is not complied with, it will be the duty of the company's weighman to make such deductions as he sees fit for the first offense; and for the second offense the miner will be discharged.

7. *Price for Mining.*

Each twenty-four (2,400) hundred pounds of coal prepared and loaded, as specified in article 6, the company will pay the miners the sum of seventy (70) cents.

398 8. *Check Weighman.*

The miners may elect a check weighman, who shall be a working miner at the time of such election, and who shall be satisfactory to the company. The meeting which elects such a check weighman shall notify the superintendent, in writing, of the name of the person elected. The check weighman not being employed or paid by the company, cannot be allowed to dictate to any of the employés of the company in any manner whatever. He will be permitted to see

all coal weighed, to examine the scales when not in use, and to report to miners the quantity of coal sent out by them, and its condition, as to proper preparation, loading, etc., as specified in article 6. The company will not recognize him in any capacity whatever. In case the check weighman shall at any time become unsatisfactory to the company, the miners shall upon ten (10) days' notice of that fact by the superintendent, proceed to and elect another check weighman under the conditions set forth in this article.

9. *Sharpening Tools.*

The company will employ a blacksmith to sharpen miners' tools, and for such sharpening of tools, a monthly sum of fifty (50) cents will be collected from each and every miner working by contract.

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10. *Oil.*

No free oil will be furnished to any employé.

11. *Physician.*

The company will elect and appoint a first-class physician and surgeon, who shall be satisfactory to the majority of the employés, and will collect on its pay-rolls the sum of one ($1.00) dollar per month from each miner, and from each person in its employ, which shall cover all services rendered, or medicine furnished to employés, or their families, except that the said physician may charge a small additional sum not to exceed ten ($10.00) dollars in cases of child-birth, and may charge the regular current physicians' fee for all cases of venereal or private nature. Employés leaving the service of this company, or who are discharged, thereupon shall forfeit all right, title and interest in or to any part or all of such service.

12. *Drunkenness.*

The practice of drunkenness is fraught with great danger, and unfits the workingman for his work. Employés who neglect their work on account of drunkenness will be discharged and not again employed.

13. *Distribution of Powder.*

For the safety of the miners, the company has appointed a man on top of the mine for to deal out the powder to the men.
400 No miner is allowed for to take down more than — five (5) pound powder can in the pit for one day's work, and each and ever- miner is to have a box in his place for to keep the powder in.

14. *Absence from Work.*

Any employé desiring to be absent from work more than one (1) day shall give notice of that fact to the pit boss, or proper foreman,

stating how long they desire to be absent. Any employé not complying with this rule will be understood to have abandoned their work and left the service of the company, and their places will be filled with others. In case of sickness or other unavoidable absence from work, employés will send notice to their pit boss or foreman, in order that their places may be retained for them.

15. *Hours of Labor.*

Ten (10) hours will constitute a day's work, or sixty (60) hours to the week.

16. *Riding on Loaded Pit Cars.*

No person except the driver will be permitted to ride on the loaded pit cars.

17. *Report Unsafe Places.*

All employés are requested to report any unsafe place to the mine boss, who shall at once have the same repaired and permit no
401 one to enter therein until it is put in proper condition. Reckless persons, or those having no knowledge of mining, will not be permitted in the mine. The mine boss will personally examine the mine and know all parts thereof are in safe condition.

18. *Close Doors.*

Employés passing through doors in any entry or air way and neglecting to close the same will be discharged.

19. *Penalty for Stealing.*

Any employé taking tools, timber or material of any kind not belonging to him will be discharged from the company's employ.

20. *Abuse of Stock and Waste of Company's Property.*

The abuse of mules, or destruction or waste of the company's property will not be permitted. Any violation of this paragraph will be considered as grounds for discharge.

21. *Intoxicated Persons Not Employed.*

Quarrelsome or intoxicated persons will not be permitted in or about the works.

22. *Visitors.*

No person or persons except those employed therein will be permitted to enter the weigh office or speak to the weighman while on duty. Visitors will not be permitted to enter the mines without permission from the superintendent.

402 23. *Settling with Discharged Employés.*

Any employé discharged from the works will be required to leave his place in good condition, to deliver any company property in his possession to the mine boss, and if he occupies a company house to vacate the same, and deliver the keys to the office before a final settlement and payment for his services will be made. Any employé neglecting or refusing to keep his place in good condition will be discharged from the work and the cost of putting his place in proper shape deducted from any balance due him.

24. *Timbering.*

To avoid accidents the company will not knowingly employ inexperienced men. All miners are cautioned to timber their places for their own safety. The miners will make application to the pit boss for such timber as they require and always keep a sufficient supply of timber in their places to avoid any accident. All the timber will be furnished by the company free of charge. The company will not be responsible for any accident occurring at any working place or room or entry nor at any other part of the mine if caused by carelessness or neglect of the party injured.

25. *Schedule of Prices.*

For driving cross-entries	$1.75	per yard
" " " cuts in cross-entries	2.00	" "
" " " " " rooms	2.00	" "

403 The company will only pay for the first two cross cuts in each room. Turning-room, thirty-foot neck, 8 feet wide, $8.00.

All the draw-slate which comes with the coal is for to be cleared up by the miner without any extra charge, also to load all the water which might be in their places. In order that the foregoing rules and regulations may be binding, and in force on both the company and employés, the Cerrillos Coal Railroad Company has caused these presents to be signed by its manager and by each and every one of its employés, and such signing on the part of its employés is hereby declared to be necessary preliminary to the procuring of work.

Signed on the part of the Cerrillos Coal Railroad Company at Los Cerrillos, N. Mex., this — day of ——, 1893.

CERRILLOS COAL RAILROAD COMPANY,

By —— ——, *Manager.*

We, the employés of the Cerrillos Coal Railroad Company, have read the foregoing rules and regulations, or have had them read to us, singly at the time of signing these presents. And do hereby, each for himself and none other, agree to abide by the said rules

and regulations and accept them in good faith with a full understanding of all they contain and require. Signed at the place and time set opposite each of our names. We, the undersigned,
404 further agree to and accept the foregoing rules and regulations for a term of three years from May 1, 1893.

We, the undersigned, agree to and accept the foregoing rules and regulations for a term of three years from April 1, 1893.

The foregoing rules were signed in said book with four hundred and sixty-one names, beginning with Josef Gabert, under date of April 3, 1893, and ending with Joseph T. McCart, under date of February 22, 1895, the name of Henri Deserant appearing under the date of April 10, 1894, and the name of Jul Deserant appearing under date of May 12, 1894, while the name of Henri Deserant, the younger, does not appear at all.

Q. You also testified on cross-examination that water was allowed to remain in the air course. Did the allowing of the water to remain in the air course, about which you testified, in any way interfere with the air circulation of the mine?

A. Not in any practicable way, the amount of water that was there.

Q. You had men under you, didn't you, Mr. Duggan, who were charged with the matter of looking after the collection of water in the air courses and various other parts of the mine?

A. Yes, sir.

Q. You testified about telling Donohue about keeping the mine free from water, did that, or did that not, necessarily mean that he should allow no water to remain in the mine, or did it refer to the permitting of water to remain in the mine which would obstruct the air circulation?

405 A. Do you mean about having all the water taken out of the mine that would not in any way interfere with the ventilation of the mine or the workings of the mine?

Q. I will ask you whether or not under the hypothetical question which was given you by Mr. Field this morning with reference to the presence of gas in any particular locality in the mine a fire boss would have performed his duty when he marked it with the danger signal commonly in use in that mine?

A. Yes.

Q. I will ask you whether or not on the Sunday and Monday prior to the explosion, room 8, in the White Ash mine was or was not a finished room?

A. Room 8 was finished on Monday morning; the last work done in there would be on Sunday night.

Q. If the current of air such as was passing through the mine on the eight days prior to the explosion, which you testified you were in the mine——

Objected to. He has not so testified.

Q. Were you in the mine during the eight days prior to the explosion?

Objected to as improper redirect examination.. Objection overruled. Plaintiff excepts.

A. Yes, I was in the White Ash mine every day for eight consecutive days with the exception of the Sunday previous to the explosion.

406 Q. If a current of air such as was passing through the White Ash mine on any one of those days was passing up against the face of room 8 on the morning of the explosion, or at the time of the explosion; please state whether or not that current of air would carry out any gas which was being generated in that locality.

A. I think it would if everything was in proper condition up there.

Q. If on the Sunday night prior to the explosion gas was moved out of room 8 by Mr. Kilpatrick, and at the time two men were working at the face of room 8, and Mr. Kilpatrick put up a fire boss's danger signal there, state whether or not any duty which was charged upon Mr. Kilpatrick had or had not been performed.

Mr. FIELD: Objected to because it is a hypothetical question not based upon the evidence of Mr. Kilpatrick and in direct conflict with it.

Objection sustained. Defendant excepts.

Q. I will ask you now, Mr. Duggan, whether or not by the placing of such a danger signal as was accustomed to be placed in the White Ash mine in order to denote the presence of gas or danger was or was not a proper and sufficient precaution against any danger, whether of gas or any other combustible.

A. Yes, that was a sufficient precaution.

Q. I will ask you this hypothetical question: Supposing that room 8 of the White Ash mine there was a danger signal placed upon a tie across the railroad track, denoting the presence of

407 gas or any other danger and that danger signal consisted of a double cross, DANGER, FIRE, and two animals, or two men, Flick and Kelly, went over that danger signal, without a previous examination of the place by some person in authority, were they or were they not disobeying orders in the White Ash mine when they crossed over such a fire or danger signal.

Mr. FIELD: Objected to as not proper redirect examination and as a hypothetical question not based upon the evidence in the case.

Objection sustained. Defendant excepts.

Q. You spoke about leaks when you spoke about the air circulation. What do you mean by leaks?

A. Air passing through the stoppings.

Q. Any other kind of leaks?

A. Air passing through the trap-doors.

Q. I will ask you whether or not in the operation of the mine it is necessary at times for the trap-doors to be opened?

A. Yes, sir.

Q. And when you spoke of leaks of that kind state whether or not you spoke of leaks necessary in the operation of the mine.

Mr. FIELD: I object to that question as leading and suggestive.

Objection overruled. Plaintiff excepts.

A. Yes.

Q. In the system which was in operation for the ventilation
408 of the White Ash mine, on the 27th day of February, 1895, what is the percentage of air coming in at the main intake which is always lost by friction or leaks before it would reach the foot of the slope of the length of that one in the White Ash mine?

A. The theoretical loss is thirty per cent.

Mr. FIELD: I move to strike out the answer of the witness as not responsive to the question.

The COURT: The last answer, gentlemen of the jury, of the witness is that the theoretical loss is thirty per cent. It is withdrawn, is not before you in evidence, and you will not consider it so.

Q. What is the loss, Mr. Duggan?

A. The loss would be according to the condition of the stoppings and the size of the air course.

Q. What is the theoretical loss?

A. It would be about thirty per cent.

Q. In your testimony this morning, Mr. Duggan, you stated that you had never done or had any experience except in the one gas explosion which happened in the White Ash mine. I will ask you whether you ever read or studied or heard about any explosions.

Mr. FIELD: Objected to unless he read or studied or heard about them before this one.

Q. I refer this one to before the explosion in the White Ash mine.

A. Yes, I have read of explosions before the one that took place in the White Ash.

Q. Had you ever prior to the 27th day of February, 1895,
409 studied into the cause of explosions and things of that kind, either in books or newspapers or sources of that kind?

A. Yes.

Q. Can you tell how many days the White Ash mine was working during February, 1895?

A. Yes, sir.

Q. How many?

A. 20 and a half days.

Q. Can you tell how many days the White Ash mine was working during the month of January, 1895?

A. Yes, sir.

Q. How many?

A. Twenty-three days.

Q. Can you tell how many days the White Ash mine was working during the month of December, 1894?

A. Yes, sir.
Q. How many?
A. Either 18 or 18½, I don't remember which.

Recross-examination.

By Mr. FIELD:

Q. How could you find out, how did you find out these things? You could not tell them to me when I was cross-examining you?
A. Taken from the records.
Q. Did you keep the record?
A. Kept right in my office.
Q. Did you keep the records?
A. I didn't do it myself personally.
Q. Where are these records?
A. They are down at the Palace hotel.
410 Q. Well, you had better produce them here for us to inspect. I want those records the next thing. If you have testified from any other record I want them, too.
Q. What books had you read treating of gas explosions in coal mines prior to the 27th of February, 1895?
A. I read one book, I don't remember the name of it, that I got from Mr. Donohue and I read another book known, I think the title is "Mine Ventilation," and another book entitled "The Colliery Engineer Pocketbook," and another book that I have got; I don't remember—it is the key to something—I have forgotten what it is just now.
Q. Who wrote these books that you read?
A. I don't know. I think one was written by Atkinson. I ain't certain or sure. The others, I don't know who is the author of them.
Q. Did you ever read a book entitled "Gases Met with in Coal Mines and Freaks of Air in Mines," the production of J. J. Atkinson, Government inspector of mines for the county of Durham in England?
A. No, sir.
Q. Did you ever hear of it?
A. I have heard of his works and read some books written by him, but not the one that you mention.
Q. Do you know whether or not he is regarded as a standard authority on gases and ventilation in coal mines throughout the world?
A. Yes, I know that he is, although I have seen other authorities different from him.
411 Q. In the course of your studies, however, you never thought it necessary to ascertain what he thought on these subjects?

Objected to as immaterial. Objection overruled. Defendant excepts.

A. I don't know that I did; I might or might not.

Q. When you say that the theoretical loss of air which ought to occur in such a shaft as the White Ash slope is 30 per cent.; just what do you mean?

A. I mean that I have seen from a French author that that is the theoretical loss.

Q. Didn't you see from the first author that a loss exceeding 30 degrees indicated a defective slope?

A. I don't remember of seeing anything of the kind.

Q. Did that authority attempt to give you the dimension of the slope which ought to lose 30 per cent. of the air?

A. No, sir.

Q. You have read somewhere that there might be such a thing as the loss of 30 per cent. of the air by friction in the main slope, have you?

A. No, sir.

Q. Never have read that?

A. No, sir, not to my knowledge.

Q. When you say that the theoretical loss is 30 per cent., do you mean to say that a loss exceeding 30 per cent. was too much or not?

412 A. I assume from that that if the loss would not be greater than 30 per cent. that the conditions of all the stoppings and the slope were good.

Q. Well, if the loss was twice that would you still assume that they were good, would you not, Mr. Duggan?

A. That would be owing to the conditions as necessary to ventilation in the mine. It would not be as good as though there was only 30 per cent.

Q. You testified upon your redirect examination that you were in the mine for 8 consecutive days, exclusive of Sunday, before the explosion. Do you mean by that to say that you were in every part of the mine on every day of those eight days?

A. No, sir.

Q. On what part of the mine were you on the day of the explosion, if any part, before the explosion?

A. I wasn't in the mine on the day of the explosion until after the explosion.

Q. In what part of the mine were you on the day before the explosion?

A. I don't remember what part.

Q. How long were you in the mine on that day?

A. I don't remember; I believe I was down in the mine that day; I was down twice one of those days, a day or two before the explosion.

Q. How long were you in the mine if you know the day before the explosion?

A. I don't remember how long.

Q. How long were you in the mine on any day of the eight days before the explosion?

413 A. I don't remember the length of time that I was in any day.

Q. What part of the mine were you on any day out of the eight days next before the explosion?

A. Well, I remember in particular that the day before the explosion I was up in room 14 in the 3d left, which was making considerable water and we thought that there was some danger of breaking into the Green mine, that was the day before the explosion, and two or three days previous to the explosion I know that I was in at the face of the 4th left main entry and every day before the explosion I know that I was in the 6th and 7th left entry.

Q. How long were you in the 4th left at the face of the entry on the occasion that you were there a few days before the explosion?

A. I don't remember.

Q. When was the last time that you went through the 4th left air course before the explosion?

A. That I don't remember.

Q. Did you go through that 4th left air course within a month before the explosion?

A. I don't remember whether I did or not.

Q. You stated upon your redirect examination that if there was a current of air such as you had seen passing in that mine for eight days before the explosion, passing to the face of room 8, that that air would have been sufficient to carry out any gas which might accumulate there, didn't you?

A. I said yes, if the conditions of the room were alright.

414 Q. Well, if the air on Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. It would be owing to what part of the room the gas was being generated from; if it was coming from the left-hand corner of the room it would take more air to move it from that point than it would if it was close to the canvas.

Q. Now, if the air on Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. I don't know but what it was carrying out the gas except what little was being generated there as I understood it.

Q. Now, if the air on the Sunday night and Monday morning and Monday night was not carrying out the gas from the face of room 8, that shows that everything was not al- right, don't it?

A. Things may be al- right and not carry out all the gas.

Q. Then you were mistaken when you said that if the current of air, which you knew was going during eight days there, had been going to the face of room No. 8, that it would have carried out all the gas?

A. No, sir, I mean—what I mean is not during all that time You can go in there and catch a lamp full of gas and it is considered there is no gas in the room.

Q. Then when you say "All the gas" you don't mean all the gas, is that what I understand?

415 A. I mean that it is a very common thing that in a room there may be a little pot-hole, some point there which at any time you could catch a lamp of gas in, and at the same time it would not be considered that there was any standing gas in the room. That is what I mean.

Q. Now, would you consider a body of gas extending across the face of the room and 10 or 11 feet down from the face any gas?

A. Yes, sir.

Q. Well, if the air was not carrying out that body of gas on Sunday night and Monday morning and Monday night, or at any one of those times, it was not carrying out all the gas and everything was not al- right?

A. If such a body of gas was there, why it would not be al- right, there would not be sufficient air.

Q. And the fire-mark by the fire boss would not be all that would be required of him with reference to such a body of gas, would it?

A. In an abandoned place if he knew of any such body of gas standing there, that is always necessary, all that was necessary.

Q. Well, now suppose it was not an abandoned place and he did know that the gas was there?

A. If it was not an abandoned place he would not have allowed the men to go in there.

Q. Who would not have allowed men to go in there?

A. The fire boss.

416 Q. What did the fire boss have to do with men going in there?

A. It was his place to tell them not to go in there until the gas was removed.

Q. Well, the fire bosses's business was to notify the miners?

A. That is what I say; if it was not an abandoned place there would not have been men working there, he would have notified them not to go in there.

Q. Well, it was no part of the fire boss's business to notify company men about gas in the mine, was it?

A. The fire bosses did not at all times know where company men were going to work; that was the duty of the foreman.

Q. Now, Mr. Duggan, if the track had not been taken up in this room 8, was it an abandoned room?

A. Yes; that is what the term means; when a room is finished, it is a finished room.

Q. There is no difference between an abandoned place and an open place, is there?

A. Yes; there is some difference.

Q. Was room No. 8 an open place in that mine at the time of this explosion?

A. Well, it was a finished place and it was abandoned so far as taking out of coal was concerned.

Q. Was room No. 8 an abandoned place in that mine at the time of this explosion?

The COURT: Answer the question Mr. Duggan.

A. Yes; I think it was.

417 Q. Now, if the fire boss discovered a body of gas such as I have described to you, in an open place in that mine and did no more than to put a fire-mark on it, and did not go back to that fire-mark within 36 hours, did he or did he not do his duty as you understand it?

A. Well, so far as the safety of the men down there was concerned, he did his duty in putting those danger signals across the entrance of each place to the room.

Q. Did you understand that I was asking you anything about the safety of the men in that mine? Or that my question related to what you understood to be the duty of the fire boss?

A. No, I supposed it had reference to the safety of the men; that is what these signals are put there for.

Q. Now, without regard to what your opinion may be as to the safety of the men, my question is, if a fire boss found such a body of gas as I have described to you, and marked it with a fire-mark and left it for from 36 to 48 hours without going back to that fire-mark at all, did he or not do his duty as you understood his duty to be?

A. Well, he did it to some extent, but I don't think he did it fully.

Q. You testified upon your cross-examination that if he found such a body of gas as that, it was his duty to take it out, if he could, without assistance, and if he could not, to go and get assistance and take it out before he did anything else, did you not?

A. Yes.

418 Q. Well, now, do you stick to that still, do you still say so?

A. That is what he should do.

Q. Do you know of any rule or custom in that mine which permitted dangerous bodies of gas to accumulate in the open place of the mine and to remain there from 36 to 48 hours, protected only by a fire-mark?

A. No, sir.

Q. I believe you say that water in the 4th left air course did not practically interfere with the air circulation?

A. The quantity of water that I knew to be in there, I don't think interfered with the quantity of air that was needed in there at the face.

Q. Water and air won't go through the same channel at the same time will they?

A. Well, a little of it, probably.

Q. Enough to ventilate a mine?

A. No, sir, hardly.

Q. Now, if that water in the 4th left air course prior to this explosion reached a point within three inches of the roof on the low side and lay in the air course for a distance of from 2,000 to 3,000 feet, would such a body of water in your opinion practically interfere with the air circulation in that mine?

Mr. TWITCHELL: Objected to as improper recross-examination, and a hypothetical question based upon facts not in evidence in the case.

Objection overruled. Defendant excepts.

419 A. I don't think it would interfere much with the quantity of air going in there in that air course in proportion to the size of that area as compared with the quantity of air passing through the same area in the main slope?

Q. Now, if such a condition did exist prior to this explosion you, as superintendent of that mine, would say that it was al- right, is that what I understand?

A. I said that I do not think there was enough there to interfere according to the quantity of air that was going in there.

Q. This is a purely hypothetical question. Now, Mr. Duggan if the water in that 4th left air course prior to this explosion had reached a point within three inches of the roof on the low side, was that condition in your opinion as superintendent of that mine, alright?

A. It would be owing to the area that would be between the water and the roof. Still I will admit that it would be in better condition if there was no water at all in there and more air would pass through that air course.

Q. Now, if there had been any such condition prior to this explosion and you had known about it, what would you have done about it?

A. I would have had it taken out if it was anything except a small quantity.

Q. I am asking you now what you would have done if you had known of a body of water reaching to within three inches of the roof on the low side and lying for from 2,000 to 3,000 feet in the air course.

420 Mr. TWITCHELL: Objected to on the ground that it is a hypothetical question based upon no evidence in the case, and further for the reason that this question has been asked about five times, and the witness has answered the question every time.

A. I would have had some of it taken out.

Q. How much?

A. I don't know just how much; I could not tell as to that without being right there to see.

Q. Every book that you have ever read as to the ventilation of mines lays down the proposition that any obstruction in the air course diminishes the supply of air, does it not?

Mr. TWITCHELL: I object to any information he may have derived from books with reference to the circulation of air in air courses as certainly improper cross-examination.

Objection overruled. Defendant excepts.

A. Yes, sir.

Q. Did your instructions to Donohue at the time you employed him as foreman of that mine contemplate that he might permit the

syphon pipe in the 4th left air course to lie idle for a period of as much as a month at a time?

Mr. TWITCHELL: Objected to as improper recross-examination. It is also a hypothetical question based upon a fact not in evidence.

Objection overruled. Defendant excepts.

421 A. I don't remember of saying anything to Mr. Donohue about the syphon except to keep the mine free from water. That's all.

Mr. FIELD: I move to strike out the testimony of this witness as to the production of the mine, because the record of the production has not been offered to us to cross-examine him upon; because it appears from the evidence that the record of that production was kept by the defendant company; that the witness has no personal knowledge on the subject but is attempting to testify upon the record and the record is the best evidence, and the record is not produced here, but an impression copy book is attempted to be produced as the record.

By Mr. TWITCHELL:

Q. Examine this page 275, Mr. Duggan, and tell me what it is.

A. This is a report of the number of days that the White Ash mine worked in the month of December, 1894.

Q. Who is it signed by?

A. It is signed by me.

Q. Who wrote your signature, yourself or your clerk?

A. The clerk.

Q. Were you in control of that book at the time that letter or this copy of that letter was written?

A. Yes, sir.

Q. Where is the original letter?

A. The originals are in Topeka, Kansas.

By Mr. FIELD:

Q. In the possession of the defendant company?

422 A. I presume so.

By Mr. TWITCHELL:

Q. To whom is that letter addressed?

A. At this time it was sent to Mr. Devlin.

Q. Is Mr. Devlin in the employ of the Atchison, Topeka and Santa Fé Railroad Co., or the Cerrillos Coal Railroad Co.?

A. No, sir. We have the original reports down at the hotel about the total production.

Mr. FIELD: We make the further objection that this is not the original record and does not purport to be an original record; that it is an attempt on the part of the defendant company to manufacture evidence for itself and that as to this witness it is the purest hearsay.

By Mr. TWITCHELL:

Q. Do you know when that was made, Mr. Duggan? State whether or not that impression there was made before or after the White Ash explosion.

A. That was made before the explosion.

By Mr. FIELD:

Q. Did you make it?

A. No, sir.

Q. Did you see it made?

A. I either saw it made or saw it at the time it was made; the day or the day after I always saw these reports before they are sent in.

Q. Who made it?

A. Made by Mr. Smith, the clerk.

Q. Where is Mr. Smith?

A. He is at Madrid.

Mr. FIELD: I renew the objection on the additional ground
423 that there is better evidence in possession of the defendant company and within its reach.

By Mr. FIELD:

Q. You stated that you had at the hotel daily reports of the production during this period, the original?

A. Yes, sir.

Mr. TWITCHELL: I propose to have him use these as a memorandum to testify from.

By Mr. TWITCHELL:

Q. Were you at the White Ash coal mine during the month of December in charge of the work there?

A. Yes, sir.

Q. Now, what days were they working in the mine, do you know?

A. Yes, sir.

Q. And the same with reference to the month of January?

A. Yes, sir.

Q. And the same with reference to the month of February?

A. Yes, sir.

By Mr. FIELD:

Q. Did this mine work on the 1st day of January, 1895?

A. No, I don't think it did.

Q. Did it work on the 2d?

A. I don't remember the days from memory, that is, each and every day the mine worked.

Q. You know nothing whatever about it except the information you got from that book, do you?

A. It is not supposed that any man could remember such a thing.

424 Mr. FIELD: I renew the motion to strike out the testimony upon the same ground.

The COURT: I will permit these books to go in.

Mr. FIELD: They haven't been offered yet. I have asked your honor to strike out his testimony that is hearsay, and that he has no knowledge on the subject.

The COURT: I will sustain the motion unless these letter-press books are offered.

By Mr. TWITCHELL:

Q. Find out, if you can, the number of days that that mine worked during the month of December, 1894.

A. Eighteen and a third days worked in December, 1894.

Mr. CLANCY: We object to his reading.

Mr. TWITCHELL: I will offer page 275 of the book marked on the outside, "Statements," and on the back, "Vouchers, A. T. & S. F. R. R. Co."

Mr. FIELD: To which the plaintiffs object- because it appears from the book as presented and upon the testimony of the witness that it is not an original record, was not made by the witness, and that the original records, of which this is a summary, are in the possession of the defendant company and of the witness and that they are in the town of Santa Fé.

Objection overruled. Plaintiffs except-.

Q. I will ask the witness to read that entry, page 275, now.

(What the witness read is as follows:)

425 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *January* 31, 1895.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of January, 1895.

Jan'y	1.	Idle holiday.	
"	2.	Worked full day.	
"	3.	Lost 5 hours, cleaning up right side.	
"	4.	Lost 5 hours, cleaning up right side.	
"	5.	Worked full day.	
"	7.	"	
"	8.	"	
"	9.	"	
"	10.	"	
"	11.	"	
"	12.	"	
"	14.	"	
"	15.	"	
"	16.	"	
Jan'y	17.	Worked full day.	
"	18.	"	
"	19.	Idle full day (pay day).	
"	21.	Worked full day.	
"	22.	"	
"	23.	"	
"	24.	"	
"	25.	"	
"	26.	Idle full day (no orders).	
"	28.	Worked full day.	
"	29.	"	
"	30.	"	
"	31.	"	

Time worked	23 days.
" lost	4 "
Total	27 days.

JAMES DUGGAN, *Supt.*

426 By Mr. TWITCHELL:

Q. Now examine that book and ascertain the time report for the White Ash mine during the month of January, 1895.

A. I have found it.

Q. What page is it?

A. Page 294.

Mr. TWITCHELL: I offer page 294 of this book, being a statement of the time of the White Ash mine for the month of January, 1895.

Mr. FIELD: Same objection as made to page 275.

The COURT: I understand that the objection offered with respect to the January and February time is the same as with respect to December, 1894, as to his knowledge.

Mr. TWITCHELL: It is the same.

The COURT: Objection overruled.

Plaintiff excepts.

Mr. FIELD: I object to the page upon the additional ground that the report for the month of January is dated January 5.

Objection overruled. Plaintiff excepts.

Page admitted in evidence.

Page 294 is as folllows:

427 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *December* 31, 1894.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of December, 1894.

Dec. 1. Idle no cars.	Dec. 17. Idle, no cars and pay day.
" 3. Worked full day.	" 18. Worked full day.
" 4. "	" 19. "
" 5. "	" 20. "
" 6. Idle no cars.	" 21. "
" 7. Worked full day.	" 22. "
" 8. "	" 24. "
" 10. "	" 25. Christmas, idle.
" 11. "	" 26. Worked full day.
" 12. Lost 3 hrs., no cars.	" 27. "
" 13. Idle no cars.	" 28. "
" 14. Lost 2 hrs., no cars.	" 29. "
" 15. Idle no cars.	" 31. Idle no orders.

Total time worked.....	18 days, 5 hrs.
" lost.....	7 " 5 "
Total.....	26 days.

JAMES DUGGAN, *Supt.*

428 By Mr. TWITCHELL:

Q. I will ask you to find the same character of report for the month of February, 1895?

A. I have it, page 310.

Mr. TWITCHELL: I offer page 310 of the same book in evidence.

Mr. FIELD: We make the same objection as to page 275.

Objection overruled and page 310 referred to is admitted in evidence. Plaintiff excepts.

Said page 310 as read to the jury, is as follows:

429 Cerrillos Coal Railroad Company.

Superintendent's office.

Copy.

MADRID, N. M., *February* 28, 1895.

Mine No. 1 B.

Report of Time Worked and Time Lost During the Month of February, 1895.

Feb'y	1. Lost 5 hrs. no orders.	Feb'y	16. Worked full day
"	2. Lost full day "	"	17. " Sunday.
"	4. Lost 5 hrs. "	"	18. "
"	5. Worked full day.	"	19. "
"	6. "	"	20. "
"	7. "	"	21. "
"	8. "	"	22. "
"	9. Lost ½ day, no o'd'rs.	"	23. "
"	11. " ½ " "	"	25. "
"	12. Worked full day.	"	26. "
"	13. "	"	27. Lost ½ day, explos'n.
"	14. "	"	28 Lost full day.
"	15. "		

Total time worked	20 days, 5 hrs.
" lost	4 " 5 "
Total	25 days.

JAMES DUGGAN, *Supt.*

430 By Mr. FIELD:

Q. Do you know from which side of the mine the majority of the coal produced in the month of January came?

Mr. TWITCHELL: Objected to as improper recross-examination, and for the further reason that the only testimony brought out by the reports just read by the witness are as to the time worked and not as to the coal produced, the number of days worked.

Objection overruled. Defendant excepts.

A. Yes.

Q. Which side?

A. The left side.

Q. Do you know from which side of the mine the coal produced in the month of February came, the majority of it?

A. Yes, sir.

Q. Which side?

A. The left side.

Q. Do you know how many men were working in the month of January on the left side of the mine?

A. I don't remember just now.

Q. Do you know how many were working there in the month of February?

A. My remembrance is that there was about 120 or 125 men.

Q. Were there more or less than that in the month of January?

A. I think there was very little difference.

Q. You have in your possession and here in Santa Fé,
431 haven't you, daily reports showing the production of that mine, just how much each place produced?

A. No, sir; there is no reports that shows the place where any men work in the mine.

Q. I mean which entry?

A. There is never any record to show where they work on the coal reports, books or any reports we have. We simply know what is the amount of coal every man gets out each shift. It has no regard to where that man works.

Q. You have reports showing how much coal each man got up during each shift?

A. Yes, sir.

Witness excused.

L. T. KINNEY, being called and sworn as a witness for the defense testifies as follows:

By Mr. TWITCHELL:

Q. What is your name, age and occupation?

A. T. L. Kinney, 25 years old, reside in Madrid.

Q. What is your business?

A. Time-keeper.

Q. Where?

A. At Madrid.

Q. In what mine or for what company?

A. For the Cerrillos Coal Railroad Company for all mines, White Ash mine.

Q. What position did you occupy during the months of December, January and February, 1895?

A. Time-keeper.

Q. Did you know Henri Deserant, Sr.?
432 A. I did.

Q. Did you know Henri Deserant, Jr.?

A. I did.

Q. Did you Jules Deserant?

A. Yes, sir.

Q. State what your position of time-keeper was, what was your business as time-keeper?

A. My duties required me to keep time of all men working, coal produced, make pay-roll.

Q. Do you know when Henri Deserant went to work for the Cerrillos Coal Railroad Co.?

A. March, 1894, I believe.

Q. Can you tell the jury how much money Henri Deserant, that is Henri Deserant, Sr., earned during the first month that he worked for the Cerrillos Coal Railroad Company. If you have a memorandum from the book made out by yourself as to the wages earned by Henri Deserant during the time he worked in the White Ash mine, you may so state?

A. Yes, sir.

Q. Produce the memorandum?

Memorandum produced.

Q. You kept the time books?

A. Yes, sir.

Q. Made out the pay-rolls?

A. Yes, sir.

Q. Kept all the time books, made up all the pay-rolls, all entries and everything?

A. Yes, sir.

Mr. TWITCHELL: What are these books lying on the table?

433 A. These are the Cerrillos Coal Railroad Company's monthly time books.

Q. Who kept these books?

A. Myself.

Q. I will ask you, if from an examination of these books, you can tell when Henri Deserant went to work in the White Ash coal mine, how long he worked, and how much he was paid from the time he went to work until his death in the White Ash mine?

Mr. CLANCY: Object to that question, or any evidence of the kind from this witness until it is shown how he kept those books, what his sources of information were and whether he knew anything of the facts that he recorded there.

Q. Do you know how long this man worked in the mine, Mr. Kinney?

A. Henri Deserant, Sr., worked, I believe five months, he was idle——

Q. Do you know when you made these entries in the book? Did you make these books from facts of your own knowledge, how long they were working and all about it?

A. Yes, sir.

By Mr. CLANCY:

Q. Do you mean to tell us that all of the men whose time you kept down there, you knew of their being at work and saw them going to and coming from their work, every man, that that was part of your business in all of the mines there are at Madrid?

A. No. Not to see that they do go to work, no, sir; I

434 don't see every man that goes to work but if they come in at night I can tell them whether they have been at work or not.

Q. How did you get at the fact- which you say are in these books, how did you learn them?

A. When the coal is hoisted from the mine it is taken to the

weigh office and weighed, sent into the office and put on these time books by myself.

Q. Well, then this time of which you speak is only the result of what is done at the weigh office?

A. Yes, sir.

Q. Then you don't know at the time you made the record that the man had been at work at all except as the record of the weigh office would show that they had sent up coal?

A. That is all.

By Mr. TWITCHELL:

Q. Each man working in the mine ran on a regular checked number, did he not?

A. Yes, each man has a check.

Q. Did you know the check numbers of the Deserants?

A. Yes.

Q. Did you know the check number of every man in the mine?

A. I suppose I did at the time.

Q. And these time books were the books from which every man was paid his month wages, were they not?

A. Yes, sir.

A. And these books or checks, I mean were accepted by
435 these men in payment for the work performed by them in the mine according to the time kept by yourself?

A. Yes, sir.

By Mr. CLANCY:

Q. Were they paid according to the time that they were worked or were they paid according to the amount of coal that they produced?

A. They were paid according to the amount of coal that they produced.

Q. Then the record as to these men would properly show only the amount of coal that they produced?

A. These records show the work of all kinds of work done by the men, hours' work.

Q. That is, the hours of time of work that would be shown for company men. You would not keep a record of that kind for coal miners who are paid by the ton, would you?

A. When they are working by the ton, I would not.

Q. There would not be any reason for it, would there?

A. No, sir.

By Mr. TWITCHELL:

Q. Don't these books show the number of tons mined by the people?

A. Yes, sir.

Q. These books were kept by yourself?

A. Yes, sir.

Q. From information sent you from the scales, from the weigh-master?

A. Yes, sir.

436 Q. And there are no entries in these books except those that you made yourself?

A. No, sir.

By Mr. CLANCY:

Q. How did that information reach you from the weigh office?

A. The coal is weighed when it comes out of the mine and they send in the weights of each check number. It is put on a sheet, duplicate numbers were made in the time books and then they are copied on to the coal books.

Q. Now, did they make at the weigh office and send to you a sheet like that as each trip came up or did they make up a sheet for you for the shift or a day and send it to you?

A. They make their sheets up at the end of every day.

Q. Do you know if it was their custom as each car was weighed to make an entry on that sheet and make them through the whole day in that way?

A. They make an entry for each car that comes up.

Q. On the sheet for the day, as it comes up?

A. Yes, sir.

By Mr. TWITCHELL:

Q. Examine these books, Mr. Kinney, and state how much Henri Deserant, Sr., made during the first month that he worked for the Cerrillos Coal Railroad Company?

Mr. FIELD: If you have a memorandum with you made from examining these books, you may speak from the memorandum?

By Mr. CLANCY:

Q. Can you tell the number of days that each of them worked?

437 A. I can tell you the number of days that coal was loaded into the railroad cars.

Q. The number of days that the mine worked?

A. Not exactly; sometimes there is coal standing over that they dumped into the railroad cars.

Q. Not the number of days then?

A. No, sir.

By Mr. TWITCHELL:

Q. Tell the jury how much Mr. Deserant, Sr., made.

A. In April, 1894, he made $58.10.

Q. Did you keep the deduction against his wages at that time?

A. Yes, sir.

Q. How much were the deductions, and what were they; what were they for?

Mr. FIELD: Objected to as irrelevant and immaterial, that is, to show his earning capacity during the entire time that he worked in the mine.

Objection overruled. Plaintiff excepts.

Mr. FIELD: The objections goes both to the deduction and the capacity of this witness to testify as to them.

Q. I will ask you whether or not in your capacity as time-keeper you sold coupons to the miners working in that mine.

A. I did.

Q. I will ask you whether these deductions represent sales of coupons or not?

A. Yes.

Q. And other charges, physicians' charges and rents, things of that kind?

438 A. Yes, sir.

Q. Well, how much were the deductions for the month of April, 1894; what did these coupons represent, Mr. Kinney?

A. They represented cash in the store, I suppose.

Q. Good for merchandise?

A. Yes, sir.

Q. Did these coupons specify a certain amount of cash which could be used as such at the company's store?

A. A coupon can be used for no other purpose except for merchandise.

Q. Merchandise where?

A. At the store.

Q. Outside of coupons were there any other deductions made?

A. Yes, sir.

Q. What were they?

A. The- were doctor, rent, blacksmithing, powder, that's all, I believe.

Q. Well, how much were these deductions for the month of April to the account of Henri Deserant, Sr.?

A. $27.

Q. And how much was the balance paid him as his net wages for April, 1894?

Mr. FIELD: I object to the proposition that it was net wages; it was all net wages. How much was the balance he got from this company we don't object to.

Objection sustained. Defendant excepts.

439 Q. What was the balance in cash paid Henri Deserant, Sr., for the month of April 1, 1894?

A. $31.10.

Q. Now answer the same questions that I have propounded with reference to the month of May, 1894, as to the amount of money earned, the amount of deduction and the amount of cash paid him?

A. His earnings were $50.12, his deductions were $32, and the balance paid him $18.12.

Q. Did Henri Deserant, Sr., work in the mine during the month of June, 1894, if you know?

A. He did not.

Q. Do you know why not?

A. I could not tell you why he did not work the first two days. The strike began on the 4th day of June.

Q. How long did that strike continue?

Mr. FIELD: Objected to as irrelevant, incompetent and immaterial.

The COURT: Sustained on the ground that it is immaterial.

Q. Did he work in July, 1894?

A. He did not.

Q. Was the mine at work in the month of August, 1894?

A. Yes, sir.

Q. Did Henri Deserant, Sr., work at that time?

A. No, sir.

Q. In the month of September was Henri Deserant, Sr., at work in the White Ash mine?

A. No, sir.

440 Q. When did he next go to work in the White Ash mine?

A. About December 11.

Q. What was the amount of money earned by him during the month of December, 1894?

A. $45.91.

Q. What were the deductions for the month?

A. $15.25.

Q. What was the amount of cash paid him?

A. $30.66.

Q. Did he or did he not work in the White Ash mine during the month of January, 1895?

A. He worked in January, 1895.

Q. How much was the amount of money earned by him during that month?

A. $51.66, deductions $38, cash balance paid him $13.66.

Q. Did he work there during the month of February?

A. Yes.

Q. How much was the amount he earned during the month of February?

A. $68.60.

Q. How much were the deductions?

A. $37.50

Q. How much cash was paid him for the balance?

A. $31.10.

Q. From the time that Henri Deserant, Sr., went to work in the White Ash mine up to the time of the explosion, state how much money was earned by him?

A. $274.39.

441 Q. And how much were the deductions?

A. $149.75.

Q. And how much cash was he paid?

A. $124.64.

Q. Did you know Henri Deserant, Jr.?

A. Yes, sir.

Q. When did he go to work in the White Ash mine, if at all?

A. He went to work the 1st day of June.
Q. How much did he earn during the month of June?
A. $5.88.
Q. How much were the deductions?
A. $5.88.
Q. How much was he paid in cash?
A. Nothing.
Q. When was the next time he performed any work in the mine?
A. In August.
Q. How much did he earn in August?
A. $39.18.
Q. How much were the deductions?
A. $10.87.
Q. And the amount of cash paid him?
A. $28.31.
Q. What was the next month he went to work in that mine?
A. September.
Q. What were his earnings in September?
A. $22.33.
Q. What were his deductions?
A. $4.25.
Q. And the amount of cash?
442 A. $18.08.
Q. How much did he earn in October?
A. $42.74.
Q. How much was the deduction?
A. $42.74.
Q. Cash paid him that month?
A. Nothing.
Q. November?
A. His earnings were $35.35, deductions $20.50, cash paid him $14.85.
Q. December, 1894?
A. $54.68, deductions $12.75, cash paid him $41.93.
Q. Month of January, 1895?
A. $44.38, deductions $13, cash $31.38.
Q. Month of February?
A. $84.82, deductions $25.75, cash $59.07.
Q. What was the total amount of money earned then by Henri Deserant, Jr., from the time he went to work in the White Ash mine until the 27th of February, 1895?
A. $329.36.
Q. And the amount of deductions?
A. $135.74.
Q. And the amount of cash paid him?
A. $193.62.
Q. Did Jules Deserant ever run any check in the White Ash mine?
A. Yes, sir.
Q. When was it?

A. September, 1894.

Q. What was the amount of money he earned in September?

443 A. $15.50.

Q. What were the deductions?

A. Deductions $11, and cash paid him $4.50.

Q. What was the occupation which he had in the White Ash mine in the month of September, 1894, if you know?

A. I could not say for sure, I believe he was trapping. I can tell by referring to the records.

Q. I will ask you whether or not Jules Deserant from the month of September, 1894, ever ran a check number in the White Ash mine as a miner?

A. He did not.

Q. I will ask you whether or not you know of your knowledge whether he worked with his father and brother in the White Ash mine?

A. I never seen him work there, I suppose he did.

Q. Did he ever receive any time check or pay check from the month of September, 1894, up to the time that he was killed in the explosion?

A. No, sir.

Cross-examination.

By Mr. CLANCY:

Q. Mr. Kinney, are you able to tell from your records the number of days that any of these men worked in any month?

A. Yes, sir.

Mr. TWITCHELL: Objected to as improper cross-examination, in the first place.

Objection overruled. Defendant excepts.

Q. Can you tell how many days Henri Deserant, Sr., in the month of April, 1894, worked?

444 A. Yes, sir.

Q. Is this a book that you kept, too?

A. Yes, that is the mine book, 17 days.

Q. Now, can you tell us how many days he worked in the month of May, 1894, the next month?

A. 13 days.

Q. I think you said the next month in which he worked was December. Will you turn to that month and see how many days he worked, in December, 1894?

A. 12 days.

Q. Now, refer to the month of January, 1895, and tell us how many days he worked?

A. 16 days.

Q. And in the month of February, 1895, how many days did he work?

A. 20 and ½ days.

Q. Now, as to Henri, the younger, refer to the month of June, 1894,

when you say he began work, and state how many days he worked in that month.

A. Two days.

Q. In the month of August, when you say he next worked, how many days did he work?

A. 14 days.

Q. In the month of September how many days did he work; September, 1894?

A. September? 8 days.

Q. In October, how many days did he work?

A. October? 14 days.

Q. In the month of November, how many days did he work?

A. 13.

445 Q. And in the month of December?

A. 17 days.

Q. And in the month of January, 1895, how many days?

A. January 10 days.

Q. In the month of February, how many days?

A. 20½.

Q. Now, Mr. Kinney, does it not appear from the figures which you have given that Henri Deserant, Sr., worked 78½ days and during that time earned $274.39?

Mr. TWITCHELL: Objected to. The amount of money which this intestate earned during that time is before the jury and the number of days in which he earned it is before the jury, and any deduction as to the *per diem* wage are for this jury to draw and not for this witness. Objected to as improper cross-examination.

Objection overruled. Defendant excepts.

A. The earnings are correct. I didn't keep any account of those days.

Q. After you have now made the computation, answer the question.

A. Yes; those figures are correct.

Q. From those figures how much does it appear that Mr. Deserant earned per day for the days that he worked?

Mr. TWITCHELL: Objected to on the further ground that the computation is made upon a calculation not taken into consideration, the fact that the plaintiff's intestate, Jules Deserant, worked

446 a portion of the time along with his brother and father, and during which labor these amounts were earned.

Objection overruled. Defendant excepts.

A. $3.49½.

Q. Now, does it not also appear from the figures which you have given that Henri Deserant, Jr., worked a total of 97½ days and during that time earned $329.36?

A. Yes, sir.

Q. Now, on the basis of those figures how much per day does he appear to have earned for the days that he worked?

A. $3.38.

Redirect examination.

By Mr. TWITCHELL:

Q. You say Henri Deserant, Sr., worked 78.5 days?
A. Yes, sir.
Q. And you have already testified as to what the deductions were against his account during those days. Please figure out the amount of deduction per day charged to the account of Henri Deserant, Sr.? Figure out the same thing for the other Deserant, how much do you make it?
A. $1.90 for Henri, Sr., $1.31 for Henri, Jr.
Q. Figure that again and see if it is not $1.40.

Court adjourned till 9 a. m. tomorrow.

Court met pursuant to adjournment.

Q. What did you find out, Mr. Kinney, with reference to
447 the daily reduction for Henri Deserant, Jr.?
A. I figure $1.39 and a fraction less than a half.
Q. Mr. Kinney, can you tell me how many miners were working in the White Ash mine during the month of December, 1894?

Mr. FIELD: Objected to as not proper redirect examination.
Mr. TWITCHELL: They went into the value per day and I want to show the average of number of days work, and the number of men and the total number of days worked by the total number of men, showing in that way the number of days per man in the mine.
Mr. CLANCY: Objected to on the ground that that which other men earned throws no light on the matter brought out in the cross-examination of this witness.
Mr. TWITCHELL: I will ask the court's permission to make this proof on the ground that I neglected to do it on the direct examination.
The COURT: I am unable to see how the number of days worked performed by other men in the mine would in any way be material as to estimating the value of the deceased; if they worked a less number of days than other men engaged in the mine, why it seems to me it won't help the defendant any at all.

Mr. FIELD: We haven't objected to his showing the num-
448 ber of days that the White Ash mine worked during these months and that is before the jury.

The COURT: Objection sustained, on the ground of immateriality.
Mr. TWITCHELL: The defendant offers to prove by the witness the total number of days worked during the month of December, 1894, the total number of days worked during the months of January and February, 1895, by the miners, in the White Ash mine.
Mr. FIELD: As to that offer the plaintiff objects because the proof is already before the jury without objection.
Mr. TWITCHELL: The defendant further offers to prove by the witness the number of men engaged in mining coal, working in the

White Ash mine during the month of December, 1894, and during the month of January and February, 1895.

Mr. FIELD: To which we make no objection.

The COURT: You can ask those questions; there is no objections.

Q. How many men were working in the White Ash mine during the month of December, 1894?

A. 2,470.

Q. The number of men?

A. 130.

Q. How many men engaged in mining coal as miners were working in the White Ash mine during the month of January, 1895?

A. Averaged, 96⅞.

Mr. FIELD: We object to any average; he is not asked about any average.

449 Q. Do you know the number of men that were working in the White Ash mine during the month of January, 1895, engaged in mining coal, the total number?

A. I don't know the actual number of men.

Mr. TWITCHELL: I thought I could prove the total number of men working in this mine by this witness and I withdraw all the testimony of this witness and the record made as to this witness this morning.

Witness excused.

Defense rests.

Rebuttal.

JOSEPHINE DESERANT recalled as a witness in rebuttal.

By Mr. FIELD:

Q. State to the jury, Mrs. Deserant, whether or not your husband and sons brought to you the coupons received by them from the defendant company and whether or not these coupons were by you used at the company store for the purpose of buying supplies for the support of yourself and the members of your family.

Mr. TWITCHELL: I object to the question, on the ground that it is immaterial as to what was done by the intestates with the coupons.

Objection overruled.

Mr. TWITCHELL: The question is objected to for the reason that it is not material as to the measure of damages in this case, which is the value of the life of plaintiff's intestate to the estate,

450 and testimony with reference to the giving to her of a portion of his earnings during his lifetime cuts no figure in this case.

Objection overruled. Defendant excepts.

A. Yes, sir.

Cross-examination.

By Mr. TWITCHELL:

Q. Did they give you these coupons every month?
A. Yes, sir.
Q. Both your husband and your son's?
A. Yes, sir.
Q. Every coupon each month that they got out of the store they brought to you, did they?
A. Yes, sir.
Q. And the coupon which your son Jules got he brought to you, too, did he?
A. Yes, sir.
Q. And you used these coupons in the purchase of supplies for the family, did you?
A. Yes, sir.
Q. And for no other purpose?
A. Yes, sir; for that purpose.

Witness excused.

JAMES MERCHANT recalled in rebuttal.

By Mr. FIELD:

Q. You have testified heretofore in this case?
A. Yes, sir.
Q. And have stated that you met Mr. Duggan down in the White Ash mine after the explosion?

451 A. Yes, sir.

Q. State whether or not you ever said to Mr. Duggan at any time when you were down in that mine after the explosion, as described by you, that you thought a lot of water from the old Green workings had run in and filled up the 4th left air course or not, or words of like import or effect.

Mr. TWITCHELL: I object to the form of the question.
Objection overruled. Defendant excepts.

A. No, sir, I don't remember of ever speaking about the old mines to Mr. Duggan; not that I can remember about, at all.

Witness excused.

CHARLES KELLY called and sworn as a witness for the plaintiff in rebuttal.

By Mr. FIELD:

Q. What is your name?
A. Charles Kelly.
Q. Where do you live?
A. At Cerrillos.
Q. Are you related to Alexjandro Kelly who was killed in the White Ash mine in February, 1895?
A. Yes, sir.

Q. State whether or not you went into that mine after the explosion for the purpose of finding your brother's body.

A. Yes, sir.

Q. Did you find him?

A. Yes, sir.

Q. Where was it?

452 A. In the back entry of the 4th left.

Q. Where?

A. In the back, close to the cross-cut.

Q. What do you mean by the back entry?

A. That is the name of the place as I always understood the word.

Q. Describe to the jury just where you found your brother's body.

A. I don't know the number of the place where he was, but the place he was I understood them to call it the back entry. I don't know a thing about in the mine, but that is the name of the place where we found him, as I understood it.

Q. Had you ever worked in the mine?

A. No, sir.

Q. Now, state how many bodies were found by you in the place where you found your brother's body?

Mr. TWITCHELL: Objected to unless it is disclosed by counsel what the intent is, the purpose of the testimony.

Mr. FIELD: The purpose of the testimony is to show that there were three bodies in the rooms where Kelly's body was found, and that they were the bodies of Kelly, Donohue and Flick.

The COURT: Answer the question.

Defendant excepts.

A. There was three bodies.

Q. Whose bodies were they?

A. Donohue's, Kelly's and another man. I don't know the man's name; Flick is his name.

453 Q. Describe to the jury the relative position of the bodies of your brother, Donohue, and the other one whose name you don't know.

A. My brother had his neck broken.

Q. No, their relative position; how they lay in this place where they were found.

A. I could not exactly tell you how they were laying; I was in a hurry to find my brother and didn't pay any attention to how they were laying; I was in a hurry to get my brother out of the mine.

Q. Which was the first of these bodies you found of these three?

A. The first I found was the stranger's.

Q. And the next one was who?

A. My brother.

Q. And the next one?

A. Donohue.

Q. How far was the body of the stranger, as you call him, from the body of Donohue?

A. He must have been from 5 to 10 feet apart, I could not exactly tell you.

Q. How far was the body of Donohue from the body of your brother?

A. He was about five feet.

Cross-examination.

By Mr. TWITCHELL:

Q. What time did you go into the White Ash mine after the explosion?

A. About a quarter after six or seven.

Q. On what day?

A. Thursday.

454 Q. What day of the month?

A. The 27th.

Q. You went in on the day of the explosion, did you?

A. Yes, sir.

Q. Who went with you?

A. There was four other men, I don't know the men.

Q. And you don't remember the names of any of the men that went with you?

A. No, sir.

Q. Did you ever meet them before?

A. Before, I don't think I ever did.

Q. Have you ever seen them since?

A. I never paid any attention; I moved away from the White Ash mine to Cerrillos and never paid any attention afterwards for them.

Q. Whose body did you bring out first?

A. I didn't bring but my brother's body out, I didn't help bring the others out.

Q. Then of your own knowledge you don't know where they found this stranger's body, do you?

A. I told you once about five or ten feet from where my brother's body was.

Q. In which direction?

A. Right back from where he was.

Q. Towards the face of the room?

A. No, sir, not towards the face of the room.

Q. Was it towards the neck of the room?

A. Yes, sir.

Q. And were you present when they found Donohue's body?

455 A. I was right there, yes, sir.

Q. Did you recognize his face?

A. His face was pretty black.

Q. But you recognized him?

A. I knowed him.

Q. Did you know him when you found him in the mine?

A. I knowed him when we found him in the mine.

Q. Which way did you get into room 8 when you found these bodies?

A. Went through the 4th left.

Q. How did you get into room 8 from the 4th left?

A. Well, the men led me in that was with me, I don't know the number of the places, but I was right with them helping them to hunt my brother out in there.

Q. Well, your brother's body was taken out before Donohue's wasn't it?

A. I think they were both taken out the same time.

Q. You are positively certain of that, too, ain't you?

A. I am certain that they took them both out.

Q. At the same time?

A. They both didn't go out in the same car, they put them both in different cars.

Q. But they took them down to the slope at the same time?

A. Took one out first and then the other one.

Q. Took your brother's first, didn't they?

456 A. Yes, sir.

Q. You are as certain about that as you are about everything else you have testified to?

A. I am certain they took my brother's body out before his.

Q. Did you go back to room 8 when you took out Flick's body?

A. I didn't take out Flick's body.

Q. Did you ever go back to room 8 after your brother's body was taken out?

A. No, sir, after my brother's body was taken out I didn't go back.

Q. When you went in there whose body was found first, your brother's or Flick's?

A. Flick's.

Q. Did you go in any other room except room 8?

A. I think not.

Q. How did you know there were any bodies in room 8?

A. I didn't know when I went down. The men led me into room 8; they had taken out a good many bodies, and they led me in there and we found him in there.

Q. Is it not a fact that your brother's body and Flick's were the last ones taken out of the mine after the explosion?

A. I think not.

Q. Did you examine the condition of Donohue's body?

A. No, sir, I didn't examine him.

Q. Never saw his body when it was brought down to the slope?

457 A. I didn't pay any attention if they brought him out at once. When I got my brother's body out I went on and didn't come back any more to the mine.

Q. Had you made any efforts to go up into that entry prior to the time that your brother's body was taken out?

A. By myself?

Q. Or with anybody else?
A. No, sir, before they had taken them out, no, sir.
Q. Were you at the White Ash mine during the evening following the explosion?
A. I was there but I didn't go in; it was late in the evening.
Q. And you saw all the bodies that were brought out as they were brought out during the afternoon?
A. I seen about all.
Q. And you are willing to swear here point blank and absolutely that Mr. Donohue's body was found 5 or 6 feet from your brother's?
A. Yes, sir.
Q. Can't you tell me the name of some one man that was in there with you?
A. No, sir, I did not know them.
Q. Do you know Mr. James Merchant?
A. No, sir.
Q. Do you know Mr. John Deighton?
A. No, sir, I do not.
Q. Do you know Mr. Duggan, the superintendent?
A. I know him, yes.
458 Q. Can you tell me the name of a single miner that went in there with you or that you saw on the slope or anywhere while you were in there while your brother was being brought out?
A. I had only been there a few days when the explosion occurred and was a stranger; you might say just there two or three weeks.
Q. When you went into room 8 did you have a lamp?
A. No, sir, it was the other men's lamp I was going by.
Q. Were you behind the other men or front of them?
A. I was right in among them.
Q. Did you recognize your brother's body the first time you saw it when you got into room 8?
A. Yes, sir, I did.
Q. Well, when you found your brother's body was — immediately taken out of the room?
A. Didn't take him out all at once, it must have been five or ten minutes before they took him out.
Q. Did you stay in that room all the time that they were trying to get your brother's body out?
A. As soon as we found him I stayed right with him until we got him out.
Q. They did not take Flick's body out of the room first although they found that first, is that so?
A. Took Flick's body out first, you say?
Q. Didn't they take his body out first?
A. I suppose they did.
Q. Did they or did they not take Mr. Flick's body out first?
459 A. They did.
Q. Did you stay in that room while they were taking his body down to the entry?
A. Yes, sir.

Q. Stayed there all by yourself?
A. I stayed right there.
Q. And waited for them to come back and then went up and found your brother's body, is that so?
A. We found the three bodies, you might say, at once.

Redirect examination.

By Mr. FIELD:

Q. What time of the night was it when you got your brother's body out of the mine, if you remember?
A. Between half past 8 and 9 o'clock.

Mr. FIELD: That is the case of the plaintiff.

Surrebuttal.

Mr. JAMES DUGGAN recalled for rebuttal.

By Mr. TWITCHELL:

Q. I believe you stated in your testimony the other day, Mr. Duggan, that you were down in the White Ash mine subsequent to the explosion and when the bodies were brought out?
A. Yes, sir.
Q. Did you know John Donohue?
A. Yes, sir.
Q. What time of the afternoon was his body brought out?
A. About four o'clock in the afternoon.
460 Q. Did you recognize the body of John Donohue when it was taken out?
A. Not except by his clothing and the cast of his features.
Q. I will ask you to describe the condition of his face and his head when he was found and brought out?
A. The only description was, is simply, it was black as coal, the entire body, clothing and everything else that was exposed.
Q. Were you there when the body of Mr. Kelly was taken out?
A. Yes, I was on the slope when his body was placed on the car at the 4th left parting, and his body was placed in the trip as I left the 4th left parting on the slope and walked up, but as I came up and reached the mouth of the slope a few minutes afterwards, the bodies of Flick and Kelly came up. They were the last bodies taken out *out* of the White Ash mine.
Q. What time was that?
A. It was at 11 o'clock at night.

Cross-examination.

By Mr. FIELD:

Q. Who brought Mr. Donohue's body out?
A. The rescuing party.
Q. Well, who?
A. The rescuing party said——

Q. I am not asking you for anything except your personal
461 knowledge of the individual, man or men, who brought Donohue's body out of that mine, if you know; if you don't, say so.

A. I can tell you the names of some of the parties who were there, but the parties were released from time to time as they were giving out as they brought down these bodies.

Q. Did you bring Donohue's body out of the mine?

A. Not out of the place where he was discovered.

Q. Do you know who did?

A. Not the exact man, I do not.

Q. You say that Donohue's body was brought out of that mine about 3 o'clock in the afternoon?

A. Yes, sir.

Q. And you are positive of that?

A. Yes, I am positive of that, about that time; it may be a little later, it may be an hour later for all that.

Q. Could not possibly be more than an hour?

A. It might be an hour and a half, but it was right about that time.

Q. You say that Kelly's body was brought out of that mine about 11 o'clock that night?

A. Yes, I do.

Witness excused.

JOHN DEIGHTON recalled in surrebuttal:

By Mr. TWITCHELL:

Q. Whose bodies were the last ones taken out of the White Ash mine after the explosion?

A. Flick's and Kelly's.

Q. Who took them out?

462 A. Well, I took them from the parting up there.

Q. Whose body did you encounter first?

A. Kelly's.

Q. Whose body did you encounter subsequent?

A. Flick's.

Q. Of what time of the day or night was that?

A. I judge it was somewhere between 10 or 11, that is, I left the house about 9 o'clock.

Q. In the day or night, was that?

A. Night.

Q. I will ask you whether or not at the time you found the bodies of Flick and Kelly, the body of Donohue had been taken out of the mine?

A. Yes, sir.

Q. What time of the day, if you know, was the body of Donohue taken out of the mine?

A. I don't remember.

Q. Who was it carried the safety lamp when you went into the room?

A. I.

Q. Who was with you?

A. Archie Chambers.

Q. Who else?

A. I don't remember the fellows that were along.

Q. When you discovered the body of Flick and Kelly did you find the body of Donohue?

A. No, sir.

463 Cross-examination:

Q. Do you know Charles Kelly, the brother of Alefamro Kelly?

A. Yes, sir.

Q. Was he with you when Kelly's body was found?

A. I don't remember who was along.

Q. You testified on the former trial of this case, didn't you, Mr. Deighton?

A. Yes, sir.

Q. Didn't you testify on that trial that you found Kelly's body about 9 o'clock at night?

A. Well, I left the house at 9 o'clock that night, it was somewhere around there.

Q. Weren't you asked this question: "How long after the explosion were you in room 8?" And did you not answer, "I think about 9 o'clock at night, the explosion was about 10.45 in the day."

A. I don't know whether I did or not.

Q. If you did so testify was it true or false?

A. Well, I am judging now that it was about between 10 and 11 that night.

Q. If you testified that it was at 9 o'clock at night on the former trial, did you tell the truth?

A. Why, yes.

Q. Your knowledge of the matter at that time was much better than it is now, wasn't it?

A. Yes, sir.

Q. Who did find Donohue's body?

A. I don't know.

Q. Did you see Donohue's body?

A. I seen it at home, that's all.

464 Q. Don't you know that 7 o'clock that night they were still looking for Donohue's body and you were still looking for Donohue's body?

—. ——.

Q. Where were you between 6 and 9 o'clock?

A. I was at home.

Q. What time did you go home?

A. I judge between three or four o'clock or something.

Q. Donohue's body had not been found when you went home, had it?

A. No, sir.

Q. And you had not come back, you say, you say now, until about 9 o'clock?

A. Yes.

Q. Then you don't know anything about when Donohue's body came out of the mine or where it came from?

A. I don't know anything about the time. I know it was between the time I went home and came back again.

Redirect examination.

By Mr. TWITCHELL:

Q. You are certain, Mr. Deighton, that at the time you found the bodies of Flick and Kelly that you did not find the body of John Donohue?

Mr. FIELD: Objected to as not proper redirect.

Mr. TWITCHELL: I withdraw the question.

Witness excused.

JAMES MERCHANT, called as a witness for surrebuttal.

465 By Mr. TWITCHELL:

Q. On the evening following the explosion in the White Ash mine, Mr. Merchant, somewhere between 6 and 7, or about 7 o'clock, state where you were?

A. Well, I went out of the mine some time and stayed at home until something like 7 o'clock of the evening; I can't just remember what time it was. Then I came back over to the mine; it was not dark; I don't remember exactly the time; something near 7 o'clock. And I went down in the mine, that is all where I was about at that time.

Q. When you went down into the mine at the point where the curtain was thrown across the main slope, state whether or not you saw the body of John Donohue?

A. Yes, sir.

Q. Where was the body?

A. The body was on the slope at the mouth of the 4th left entry.

Q. I will ask you whether or not at that time all of the bodies had been brought out of the mine?

A. I can't remember whether Donohue's body was the last or whether there was others to come after his.

Q. Well, did you go into the 4th left entry?

A. Yes, sir, I went in part way in the 4th left, as near as I remember; I don't remember just how far I went at; I remember being in the 4th left, some part of it.

Q. Was Archie Chambers in there at that time with the rescuing party looking for bodies?

A. I don't remember who was in there; I do not know who was in there at all.

466 Q. Well, were you in there when the bodies of Flick and Kelly were brought out of the mine?
A. Not that I can remember of.
Q. Then you don't know what time their bodies were brought out?
A. No, sir.

Cross-examination.

By Mr. FIELD:

Q. Might it not have been as much as half past 8 o'clock, or later, when you saw Donohue down there?
A. I don't remember if I lost anything, but it might have been possible that I did in going down the slope, and if I had stopped in going down the slope, it might probably have been that late.
Q. You have no present recollection of the time of the night except that you know it was pretty late at night when you saw Donohue's body there?
A. That is all I remember.
Q. And you don't know whether Flick and Kelly's bodies had been taken out or not?
A. No.

Mr. TWITCHELL: That is our case.

Rejoin-er.

Mrs. LINA ROMERO DE KELLY, called by the plaintiff as a witness in rejoin-er.

By Mr. FIELD:

Q. At what time on the night of the explosion in the White Ash mine was the body of your boy brought to your house?

Objected to as improper rebuttal. Objection overruled. Defendant excepts.

467 A. At 9 o'clock.

Cross-examination.

By Mr. TWITCHELL:

Q. Were you at the house or at the mine, Mrs. Kelly?
A. At my house.
Q. Who was there with you?
A. All my family.
Q. Your son Charles?
A. Yes, sir.

By Mr. FIELD:

Q. Your son, Charles, brought the body, didn't he?
A. Yes, sir.

Mr. FIELD: That is the case.

Court adjourned until 6 p. m., 12, 29, '97.

Court met pursuant to adjournment.

At this time both the defendant and the plaintiff offer requests for peremptory instructions to the jury to find for their respective sides.

The COURT: Both motions will be denied.

Mr. FIELD: I except for the plaintiff.

Mr. TWITCHELL: I except on the part of the defendant.

And thereupon the judge proceeded to instruct the jury as follows:

1.

Gentlemen of the jury, you are instructed that *that* the plaintiff in these cases, Josephine Deserant, is the administratrix of the effects, goods, chattels and estate of Henri Deserant, deceased,
468 her late husband, and of Henri Deserant, deceased, her minor son, and Jules Deserant, deceased, another minor son, and that by an order heretofore made, the three cases, Nos. 3580, 3581 and 3582, in which she is the plaintiff and The Cerrillos Coal Railroad Company is the defendant, have been, and are for the purpose of this trial consolidated, and you are instructed that all the facts brought out and before you in evidence are intended to apply to all the said three cases, and that the law as given you by the court is intended to apply to the said three cases, and in considering the facts and the law as given you by the witnesses and by the court, you will apply the facts and the law to each of said three cases separately, and you will determine each case separately.

2.

You are instructed that the said plaintiff alleges and charges in her three declarations in these cases, that her said deceased husband and her said two deceased minor sons were on the 27th day of February, 1895, employed by the said defendant as coal-miners, and were on said day employed in mining coal for said defendant in the White Ash mine, which at that time belonged to said defendant, and was then under the control and management of the servants, agents and employés of the said defendant, and that while so employed by the defendant, and while so engaged and occupied in so mining coal in said White Ash mine on the said 27th day
469 of February, 1895, an explosion of gases alleged to have accumulated in said White Ash mine occurred, by which plaintiff's intestates were killed in said mine.

3.

The declarations in each of these three cases allege and charge in substance as follows, to wit:

1. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to employ and keep efficient, experienced and competent men in charge of said

mine to oversee, superintend and manage the works and workings in and about the said mine and any and all things pertaining thereto.

2. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to provide and keep in proper condition and repair all necessary slopes, air shafts, entries, cross-cuts, air courses, conduits and break-throughs for the free and unobstructed circulation of sufficient pure and fresh air in said mine for the safe and proper protection of the men then working in said mine.

3. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to provide and keep in proper repair and in constant operation proper and necessary machinery and appliances for the proper and necessary ventilation of the said mine and to supply said mine with a proper and sufficient quantity of fresh air to drive out, expel and dilute
470 and render harmless any and all poisonous, noxious and dangerous gases which might or may have at the time of the alleged explosion accumulated in any part of said mine.

4. That it was the duty and was incumbent on the defendant prior to and at the time of the alleged explosion to employ and keep fit, competent and experienced persons to inspect said mine and detect and discover noxious, poisonous and explosive gases which might accumulate in said White Ash mine, and to warn the employés of defendant of danger from such gases.

—

Plaintiff also alleges in her three declarations in these cases in substance as follows, to wit:

1. That the said defendant carelessly and negligently employed unfit, incompetent, unsuitable, unskillful and inexperienced persons to oversee, manage and superintend the operation and workings of its said White Ash coal mine.

2. That the said defendant negligently and carelessly failed to provide fit, suitable and sufficient air shafts, air passages, stoppings, break-throughs and other conduits through which might be forced by proper machinery and appliances a sufficient quantity of pure air, to dilute and render harmless, noxious, poisonous and explosive gases, which are alleged to have been generated and accumulated in said mine.

3. That said defendant carelessly and negligently provided unfit, unsuitable and insufficient air shafts, air passages, stoppings, break-throughs and other conduits through which a sufficient
471 quantity of pure air could not be forced by proper appliances and machinery to dilute and render harmless any noxious, poisonous and explosive gases which might be generated and accumulated in said mine.

4. That the said defendant carelessly and negligently failed to provide suitable and sufficient machinery and other appliances for forcing pure air into said mine and into the working places thereof in sufficient quantity to dilute and render harmless and to expel

therefrom any noxious, poisonous and explosive gases which might be or were from time to time generated in said mine, and to keep the working places of said mine free from the said gases.

5. That the said defendant carelessly and negligently failed to provide or employ fit, competent, skillful and experienced persons to oversee and superintend and manage the operation of said mine, and to inspect the same so as to discover and detect any noxious, poisonous and explosive gases which might be or were generated from time to time in the working places of the said coal mine.

6. That the said defendant carelessly and negligently failed to keep open and free from obstructions the air shafts, slopes, air courses, break-throughs and stoppings in said coal mine for the free circulation of sufficient pure air in the slopes, air courses, entries and rooms and other working places in said mine for the protection and safety of the men working therein.

472 7. That by reason of some alleged careless and negligent acts set forth in plaintiff's declarations, the defendant, through its agents, servants and employés, employed and put in charge of said mine by the defendant permitted noxious, poisonous and explosive gases to accumulate and stand in said mine which it is alleged became ignited and from which it is alleged an explosion occurred on said 27th day of February, 1895, and from which explosion it is alleged plaintiff's intestates were killed and the plaintiff in these suits seeks to recover damages from the defendant for the loss of her said husband and two said sons.

5.

The defendant pleads not guilty and this plea puts in issue all the allegations charged against it by the plaintiff in her declarations.

6.

While there are several counts in each declarations, it is not incumbent on the plaintiff in either of said cases to establish all of the causes of action set forth in the said several counts of the declaration, but if the allegations of any single count of the declaration in each case are established by a preponderance of the evidence, the plaintiff is entitled to recover.

7.

You are instructed that these actions are statutory and the
473 plaintiff claims her right and seeks to recover the damages alleged to have accrued to her under the laws of this Territory, which statute upon which these actions are founded is as follows, to wit:

"Whenever the death of a person shall be caused by the wrongful act, neglect or default of another, although such death shall have been caused under such circumstances as amount in law to a felony and the act or neglect or default is such as would, if death had not ensued, have entitled the party injured to maintain an action and recover damages in respect thereof, then and in every

such case the person who, or the corporation which would have been liable if death had not ensued shall be liable to an action for damages, notwithstanding the death of the person injured."

8.

By section 6 of an act of Congress, approved March 3, 1891, it is provided as follows:

"SEC. 6. That the owners or managers of every coal mine at a depth of one hundred feet or more shall provide an adequate amount of ventilation of not less than fifty-five cubic feet of pure air per second, or thirty-three hundred cubic feet per minute, per every fifty men at work in said mine and in like proportions per a greater number, which air shall by proper appliances or machinery be forced through such mine to the face of each and every working place so as to dilute and render harmless and expel therefrom the noxious or poisonous gases and all workings shall be kept clear of standing gas."

474 If, therefore, the jury believe from the evidence that the defendant, The Cerrillos Coal Railroad Company, was operating a coal mine at a depth of more than one hundred feet below the surface of the earth, and that the plaintiff's intestates respectively, were employed by the defendant in the operation of said coal mine, it was, by reason of the said act of Congress, the duty of the defendant to provide an adequate amount of ventilation of not less than thirty-five cubic feet of pure air per second or thirty-three hundred cubic feet per minute for every fifty men who worked in said mine, which air should have been, by proper appliances or machinery, forced through such mine to the face of each and every working place therein, so as to dilute and render harmless and expel therefrom the noxious or poisonous gases, and all workings of such mine should have been kept clear of standing gas in dangerous quantities; and if the jury believe from the evidence that the defendant, The Cerrillos Coal Railroad Company, failed or neglected to provide an adequate amount of ventilation so as to dilute and render harmless and expel from the said mine the noxious poisonous gases which were generated therein, or to keep the working places of said mine clear of standing gas, such failure on the part of the defendant may be considered by the jury as evidence of negligence on the part of the defendant.

9.

475 Negligence is defined to be the ommission to do something which a reasonable man, guided by those considerations which ordinarily regulate the conduct of human affairs, would do, or the doing something which a prudent and reasonable man would not do. It must be determined in all cases by reference to the situation and knowledge of the parties and all the attending circumstances. If an occupation attended with danger can be prosecuted by proper precautions without fatal results, such precautions must be taken by the promoters of the pursuit or employers of laborers therein. All occupations producing articles or works of

necessity, utility or convenience, may undoubtedly be carried on and competent persons familiar with the business and having sufficient skill therein, may properly be employed upon them, but in such cases where the occupation is attended with danger to life or limb, it is incumbent on the promoters thereof, and the employers or others thereon, to take all reasonable and needed precautions to secure safety to the persons engaged in their prosecution, and for any negligence in this respect from which injury follows to the persons engaged, such promoters and employers may be held responsible and mulcted to the extent of the injury inflicted, if any. Occupations, however important, which cannot be conducted without necessary danger to life, body or limb, should not be prosecuted at all without reasonable precautions against such dangers afforded by science. The necessary danger attending them should operate as a prohibition of their pursuit without such safeguards. In-
476 deed, it may be laid down as a legal principle that in all occupations attended with great and unusual danger, there must be used all appliances readily attainable known to science for the prevention of accidents, and that a neglect to provide such readily attainable appliances, and to keep the same in fit and suitable condition, will be regarded as proof of culpable negligence.

10.

I charge you, gentlemen, that it is the duty of the master to use reasonable care and diligence to provide a reasonably safe place in which his servants shall perform their respective duties, and also to use reasonable care and diligence to provide reasonably safe appliances for the protection of his servants, and to use reasonable care and diligence to keep such appliances in a reasonably safe condition for the protection of his servants; and the master cannot, by the delegation of any part of his duty to an agent, or servant, relieve himself of responsibility for injuries to his servants arising from the neglect of this duty. Any agent or servant of the master, appointed by him for the purpose of looking to the safety of such appliances without regard to the rank or station of such agent, or servant, is the representative of the master for such purpose, and the negligence of any such agent or servant in such matters, is, in contemplation of the law, the negligence of the master and the master is liable for any damage occasioned thereby.

477 11.

Although you may believe from the evidence that the fellow-servants of the deceased by their negligence contributed to the bringing about of the explosion in which deceased were killed, yet, if you also believe from the evidence that the negligence of defendant also contributed to the same result, you must find a verdict in favor of the plaintiff, unless you believe from the evidence that plaintiff's intestates, or one of them knew or had means of knowledge of such negligence of defendant, and notwithstanding such knowledge or means of knowledge, continued to work in the mine of defendant.

12.

The law requires that the defendant shall keep the workings in its mine clear of standing gas, and if you believe from the evidence the defendant failed to keep the workings in its mine clear of standing gas, and that such failure contributed to the deaths of the deceased, then you are justified in believing defendant guilty of negligence and you must find a verdict in favor of the plaintiff unless you believe from the evidence that the plaintiff's intestates or one of them knew of the existence of such gas and continued to work in the mine of defendant with such knowledge.

13.

478 If the jury believe from the evidence that the plaintiff's intestates knew or had reason to know that dangerous bodies of gas were permitted to accumulate in the open places of defendant's mine and to remain for a period of thirty-six hours or more, without any effort on the part of the agents and the servants of defendant to move the same, and that no precautions against the explosion of such gases were accustomed to be taken except to mark the open place where such gas might be with a danger mark, and plaintiff's intestates, notwithstanding such knowledge or means of knowledge, continued to work in said mine, the plaintiff's intestates thereby assumed the risk incident to such method and cannot recover if their fellow-servants ignited such gas by going over or disregarding such fire-mark.

14.

If you believe from the evidence that the explosion originated in room eight of the fourth left entry of the mine in consequence of the accumulation in said room of a body of dangerous gas, merely guarded by a fire-mark or danger signal for thirty-six or forty-eight hours before the explosion, and that plaintiff's intestates did not consent or agree to work in said mine with places dangerous because of gas merely guarded by fire-marks or danger signals for thirty-six or forty-eight hours, then plaintiff is entitled to recover in each case, although you may also believe that said body of dangerous gas was ignited by the negligence of fellow-servants of plaintiff's intestates.

479 15.

If you reach the conclusion that plaintiff is entitled to recover, then, in estimating the amount of damages to be assessed for the deaths of the several intestates of plaintiff, you must take into consideration the proof, if any, as to age, earning capacity, health, habits and probable duration of life, and from that proof ascertain what is the present worth of the life of deceased with nothing to be added by way of solace to the party or parties entitled to the proceeds of recovery, and nothing for suffering or anguish of mind or body by the deceased. In considering such proof you are instructed that life and annuity tables, showing at

any age the probable duration of life, and the present value of a life annuity, are competent evidence, but you are instructed that the rules to be derived from such tables, or computations, are not to be taken as the absolute guide of your judgment and conscience, but if you find in favor of the plaintiff you should award a fair and reasonable compensation, taking into consideration what the income of plaintiff's intestate would probably have been, how long it would have lasted, and all the contingencies to which it was liable, such as probable diminution or increase of earning capacity, and that you are not to be bound by precise mathematical rules in deciding a question involving so many contingencies incapable of exact estimate or proof.

480 16.

In these cases, the burden of proof is upon the plaintiff to make out her case by a preponderance of the evidence, and by a preponderance of the evidence is meant that the evidence on behalf of the plaintiff must be of greater probative force and must outweigh the evidence on behalf of the defendant. It is not, however, required as in criminal cases, that the plaintiff shall make out her case by evidence, beyond a reasonable doubt, or to the exclusion of every possibility of a want of negligence on the part of the defendant. If the evidence is equally balanced, however, so that the jury cannot from the evidence determine whether or not the defendant was guilty of negligence, the plaintiff cannot recover.

17.

You are the sole judges of the credibility of the witnesses and of the weight to be given to the testimony of each witness; and in determining the weight to be given to the testimony of any witness you may consider his manner and conduct on the stand, his relation to the party and his interest, if any, in the result of the case.

18.

The court hands you herewith blank forms for your verdicts in all the cases, one set of such forms for use in case you find the issues in favor of the plaintiff, and the other set for use in case
481 you find the issues in favor of the defendant. If you find in favor of the plaintiff, you will fill in the amount of damages. if you find any, in the blanks for each case separately in the first set of verdicts, and you will sign each verdict separately. If you find in favor of the defendant you will sign each verdict in the other set separately.

And the court, at the request of counsel for defendant, proceeded further to instruct the jury as follows:

1.

The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and

use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty towards the miners in that respect.

6.

Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room eight for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room eight, and further believe from the evi-
482 dence that signals of the kind described in the evidence warning against entry into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor.

10.

The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed, there still was space enough in the air course unobstructed to
483 allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons.

11.

If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into the said room with a naked light (contrary to the rules and orders of

the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant.

And the plaintiff then and there objected to the giving of the instruction numbered one asked by defendant, because said instruction fails to tell the jury that it was incumbent on the defendant to use reasonable care to keep its appliances in a reasonably safe condition, and because it is in conflict with instruction numbered ten given by the court in its general charge; and because it is
484 erroneous in that while purporting to set forth the full measure of defendant's duty, it fails in several important particulars to do so, especially as to the duty of defendant to use due care to employ fit and competent persons to look to the safety of its appliances, etc.; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction, plaintiff then and there duly excepted.

And plaintiff also objected to the giving of instruction numbered six asked for by defendant because it ignores the evidence tending to show that Donohue, the mine foreman, went into room eight with Flick and Kelly and does not tell the jury the legal effect of the ignition of the gas by Donohue if they should believe it was so ignited; and also because it fails to tell the jury that the ignition of the gas by Flick and Kelly would not excuse defendant unless plaintiff's intestates had knowledge or means of knowledge of the existence of the gas and of the method of using fire-marks or danger signals and consented to work with such knowledge; and because there is no evidence upon which the court could properly submit to the jury the question of the use of fire-marks or danger signals against gas known to the fire bosses and mine foreman to have accumulated in the mine; and because it tells the jury that if Flick and Kelly entered the room with a naked light and caused the explosion, defendant is entitled to a verdict without telling the jury that they must have seen the fire-mark and danger signal and crossed it contrary to its demand; and also because the instruction
485 is in direct conflict with instructions numbered 10, 11, 12, 13 and 14 given by the court in its general charge; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction to the jury the plaintiff then and there duly excepted.

And plaintiff objected to the giving of instruction numbered ten asked by defendant, because it is not a correct statement of the law; because it amounts to a comment on the weight of the evidence; because it selects a portion of the evidence and makes it unduly prominent, and tends to induce the jury to consider the evidence piecemeal; because it tells the jury that if the obstruction in the air course was not sufficient to prevent the passage of the necessary quantity of air, the defendant is not liable, and in effect that if the

space left in the air course was sufficient to permit the passage of such necessary quantity of air, they should assume that such necessary quantity of air was passing through it to the working places in the mine and there was nothing about the ventilation of the mine to which they need give attention, notwithstanding that the evidence shows that the air was not going to the face of room eight for more than forty-eight hours before the explosion; but the court overruled said objection, and to the action of the court in overruling said objection and in giving the said instruction to the jury, the plaintiff then and there duly excepted.

And the plaintiff objected to the giving of instruction numbered eleven, given at the request of defendant, because there is no
486 evidence in the case upon which the same could properly be based, there being no evidence from which the jury could properly infer that Flick and Kelly went into room eight contrary to any rule or order of defendant, while the instruction ignores the evidence which tended to show that Flick and Kelly went into room eight in company with the mine foreman and under his direction; and because said instruction in effect tells the jury that from the fact that Flick and Kelly were found dead in room eight they might nfer that they went in there contrary to orders and rules of defendant, as there is no evidence of any violation by Flick and Kelly of any order or rule of the company except the bare fact that they were found dead in the room; and also because said instruction is in conflict with instructions numbered 11, 12, 13 and 14 in the general charge of the court; but the court overruled said objection, and to the action of the court in overruling said objection and in giving said instruction to the jury, plaintiff then and there duly excepted.

And plaintiff further objected to the giving of the instructions numbered six and eleven, as asked by defendant, because the court should have told the jury that if Flick and Kelly went into room numbered eight, in company with or under the direction of the mine foreman, Donohue, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion they were using due care to avoid accident, the defendant was liable notwithstanding the explosion may have been directly occasioned by the act of
487 Flick and Kelly; and to the action of the court in overruling said objection and in giving the said instructions, the plaintiff then and there excepted.

And plaintiff further objected to the said instructions asked by defendant, and numbered six and eleven, because they ignore the fact that there was evidence tending to show that Donohue's body was found in room number eight in close proximity to the bodies of Flick and Kelly, and the fact that from this evidence the jury might infer that Donohue ignited the gas; but the court overruled said objection, and to the action of the court in overruling said objection and in giving the said instructions, the plaintiff then and there duly excepted.

And the said jury having returned a verdict in favor of the de-

fendant, afterwards, to wit, on the 3d day of January, 1898, the plaintiff by her attorneys, made and filed her motion for a new trial, which motion was in the words and figures following, to wit:

JOSEPHINE DESERANT, Administratrix,
vs.
THE CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582.

Now comes the plaintiff in each of the above entitled three causes by her attorneys, and moves the court to set aside the verdict rendered in each of said causes at a former day of his term, and to grant her a new trial therein, for the following reasons:

488

I.

The verdict is against the law.

II.

The verdict is against the evidence.

III.

The verdict is against the weight of the evidence.

IV.

The verdict is entirely unsupported by the evidence.

V.

The verdict is against the law and the evidence.

VI.

The court admitted improper evidence over the objection of the plaintiff.

VII.

The court refused to admit proper and legal evidence offered by the plaintiff.

VIII.

The court erred in refusing to instruct the jury as requested by the plaintiff at the close of the evidence, that the defendant was guilty of negligence.

489

IX.

The court erred in refusing to take the case from the jury and find the facts when both plaintiff and defendant asked for a peremptory instruction.

X.

The court erred in submitting anything to the jury except the question of the assessment of plaintiff's damages.

XI.

The court erred in giving the instruction number one asked by the defendant, as follows, to wit:

"The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary it is presumed that the defendant performed its entire duty towards the miners in that respect."

Because said instruction fails to tell the jury that it was incumbent on the defendant to use reasonable care to keep its appliances in a reasonably safe condition and the same is in conflict with
490 instruction number 10 given by the court in its general charge. Said instruction is also erroneous in that while purporting to set forth the full measure of the defendant's duty it fails in several important particulars to do so, especially as to the duty of the defendant to use due care to employ fit and competent persons to look to the safety of its appliances, etc.

XII.

The court erred in giving instruction number six asked by the defendant, as follows, to wit:

"Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room eight for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room eight, and further believe from the evidence that signals of the kind described in the evidence warning against entering into said room were placed in such a manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantities then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in his favor."

491 Because the said instruction ignores the evidence on behalf of plaintiff tending to show that Donohue, the mine foreman, went into room eight with the miners Flick and Kelly and does not tell the jury the legal effect of the ignition of the gas by Donohue if they should believe that it was so ignited. It also fails to tell the jury that the ignition of the gas by Flick and Kelly would not excuse the defendant, unless the plaintiff's intestates had knowledge or means of knowledge of the existence of the gas and of the method of using fire-marks or danger signals and consented to work with

such knowledge, and because there was no evidence in the case upon which a court could properly submit to a jury the question of the use of fire-marks or danger signals as against gas known to the fire bosses and mine foreman to have accumulated in the mine, and said instruction tells the jury that if Flick and Kelly entered the room with a naked light and thus caused the explosion, the defendant is entitled to a verdict without telling the jury that they must have seen the fire-mark or danger signal and crossed over it contrary to its command. The said instruction is also in direct conflict with instructions numbers 10, 11, 12, 13 and 14 given by the court in its general charge.

XIII.

The court erred in giving instruction number 10 asked by the defendant as follows, to wit:

"The burden of showing negligence on the part of defend-
492 ant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air courses through which that portion of the mine where the deceased persons worked was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that notwithstanding the partial obstruction existed there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons."

Because the said instruction is not a correct statement of the law. It amounts to a comment on the weight of the evidence, and selects out a portion of the evidence and makes it unduly prominent, and tends to induce the jury to consider the evidence piecemeal. It tells the jury that if the obstruction in the air course was not sufficient to prevent the passage of the necessary quantity of air, the defendant was not liable and in effect tells the jury that if the space left in the air course was sufficient to permit the passage of
493 such necessary quantity of air they should assume that such necessary quantity of air was passing through it to the working places in the mine and there was nothing about the ventilation of the mine to which they need give attention, notwithstanding the evidence showed that the air was not going to the face of room eight for more than forty-eight hours before the explosion.

XIV.

The court erred in giving instructions number eleven given at the request of defendant as follows, to wit:

"If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into the said room with a naked light (contrary to the rules and orders of the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a verdict should be rendered for the defendant."

Because there is no evidence in the case upon which the said instruction could properly be based, there being absolutely no evidence from which the jury could properly infer that Flick and Kelly
494 went into room eight contrary to any rule or order of the defendant company and the said instruction ignores the evidence which tended to show that Flick and Kelly went into room eight in company with Donohue, the mine foreman and under his direction; and as there is no evidence of any violation of any order or rule of the company except the bare fact that they were found dead in the room, said instruction in effect tells the jury that if Flick and Kelley were found dead in room eight they might infer from that fact alone, that they went in there contrary to the orders or rules of the defendant, and also because said instruction is in conflict with instructions numbered 11, 12, 13 and 14 in the general charge of the court.

XV.

Because the court should have told the jury that if Flick and Kelly went into room number eight in company with or under the direction of the mine foreman, Donohue, without any knowledge of the existence in said room of a dangerous body of gas, at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstanding the explosion may have been directly occasioned by the act of Flick and Kelly.

XVI.

Because the court in its charge to the jury ignored the fact
495 that there was evidence tending to show that Donohue's body was found in room number eight in close proximity to the bodies of Flick and Kelly, and the fact that from this evidence the jury might infer that Donohue ignited the gas.

XVII.

Because the verdict of the jury is manifestly the result of a misapprehension of the case by the jury or of improper influences exercised on the jury outside of the court-house.

XVIII.

Because the plaintiff has not had a fair and impartial trial and is entitled to have each of said causes submitted to another jury.

FRANK W. CLANCY,
NEIL B. FIELD,
Attorneys for Plaintiff.

And the said motion having been argued by counsel and submitted to the court was taken under advisement, and afterwards, to wit: on the fourth day of February, 1898, was denied by the court, to which *the* ruling and action of the court in denying the said motion for a new trial, the plaintiff then and there duly excepted.

And because the foregoing matters are not matters of record in said causes, the plaintiff prays that this her bill of exceptions containing the same may be signed, sealed and made a part of
496 the record, which is accordingly done this 22d day of June, 1898; and it is hereby certified that this bill of exceptions contains all of the evidence given on the trial of said causes, and all of the instructions which were given to the jury.

JOHN R. McFIE, [SEAL.]
Associate Justice of the Supreme Court of the Territory of New Mexico and Judge of the District Court for the County of Santa Fé.

Defendant agrees to the correctness of the foregoing bill of exceptions, and consents that the same may be signed and sealed by any justice of the supreme court.

R. E. TWITCHELL,
Att'y for Defendant.

June 21, 1898.

And afterwards, to wit, on the 23d day of June, 1898, there was filed in the office of said clerk a stipulation, which stipulation was in the words and figures following, to wit:

497 In the District Court for the County of Santa Fé.

JOSEPHINE DESERANT, Administratrix,
vs.
CERRILLOS COAL RAILROAD COMPANY. } 3580, 3581, 3582. Trespass.

It is hereby stipulated and agreed by and between the parties to the said three causes that the clerk of this court may make and certify a single record in return to the three writs of error issued from the supreme court of the Territory to bring up said causes for review, and that this stipulation shall be considered as a part of the record herein, and shall be incorporated by said clerk in his transcript.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff.
R. E. TWITCHELL,
Attorney for Defendant.

TERRITORY OF NEW MEXICO,
County of Santa Fé.

I, the undersigned clerk of the district court for said county do hereby certify that the foregoing is a full, true and perfect copy of so much of the record in three certain cases lately pending
498 in said district court in each of which Josephine Deserant, administratrix, was plaintiff and Cerrillos Coal Railroad Company was defendant, as the counsel for said plaintiff directed me to make up and include herein as my return to the writs of error issued out of the supreme court of said Territory for the purpose of taking up for review the record and proceedings of each of said cases.

In witness whereof I have hereunto set my hand and the seal of said district court this 24th day of June, 1898.

[SEAL.] A. M. BERGEVE, *Clerk.*

499 And afterwards, to wit, on the 25th day of July, 1898, there was filed in the office of the clerk of the supreme court for the Territory of New Mexico an assignment of errors in said causes; which said assignment of errors is in words and figures following, to wit:

TERRITORY OF NEW MEXICO:

In the Supreme Court, July Term, A. D. 1898.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 777.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 778.

JOSEPHINE DESERANT, Administratrix, *vs.* CERRILLOS COAL RAILROAD COMPANY. No. 779.

Consolidated.

Assignment of Errors.

Comes now the plaintiff in error in each of the three above and foregoing consolidated cases and shows to the court here that in the record, proceedings, and judgments of the district court of the county of Santa Fé, in the Territory of New Mexico, there is manifest error to the prejudice of this plaintiff in error in this, to wit:

I.

The court erred in overruling the objection of plaintiff in error to the question, "Then if this explosion occurred at 10.45 state whether or not—state what at that particular time the miners in the room would be engaged in." (Page 132 of Transcript.)

II.

The court erred in permitting the witness Fletcher to testify over objection of plaintiff in error that he had seen flame from a gunning shot extend seventy feet in the third right entry of the White Ash mine. (Trans., page 134.)

III.

The court erred in permitting the witness Fletcher to answer the question, "What effect, if any, would such a condition have upon small quantities of gas there passing in any portion of the mine or in any portion of fourth left entry which, under ordinary conditions, would in no way be dangerous in the operation of the mine?" (Trans., page 135.)

IV.

The court erred in permitting the witness Fletcher to answer the question, "From your experience as a miner and your connection with mines which generate gas, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine?" (Transcript, page 148.)

500

V.

The court erred in permitting the witness Fletcher to answer the question, "I will ask you what any two men going into room 8 and finding the brattice in that room down, would have done if they had seen a danger signal lying across the track in that room?" (Transcript, page 178.)

VI.

The court erred in refusing to permit the witness Kilpatrick to answer the question, "Was there any means provided for removing that water from the 4th left air course prior to the explosion?" (Transcript, page 227.)

VII.

The court erred in permitting the witness Duggan to answer the question, "With reference to the operation of coal mines of the character of the White Ash, I will ask you now, whether or not you are able to state whether the stoppings in the various cross-cuts were or were not of the kind accustomed to be used and placed in mines of that character for the purpose of carrying air around to the face of the working places?" (Transcript, page 347.)

VIII.

The court erred in refusing to permit the witness Duggan to answer the question, "If such an opening were made by the fire boss under the direction of the mine fireman, should it have been reported to you?" Transcript, page 374.

IX.

The court erred in refusing to permit the witness Duggan to answer the question, "Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?" Transcript, page 378.

X.

The court erred in refusing to permit the witness Duggan to answer the question, "And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not so?" (Transcript, page 387.)

XI.

The court erred in refusing to instruct the jury at the close of the evidence that the defendant was guilty of negligence.

XII.

The court erred in refusing to take the case from the jury and find the facts when both parties asked for peremptory instructions.

XIII.

The court erred in submitting to the jury anything except the question of damages.

XIV.

The court erred in giving instruction number 1 asked by the defendant as follows: "The jury are instructed that — was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine, that were obvious or might with reasonable diligence have become known; and in the absence of evidence to the contrary, it is presumed that the defendant performed its entire duty towards the miners in that respect." (Trans., page 481.)

XV.

The court erred in giving instruction No. 6 asked by the defendant as follows, to wit: "Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe
501 from the evidence that *that* signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased Flick and Kelly, and the meaning and significance of such signal was understood by them and such signal was known to be in use by the miners

engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor." (Trans., page- 481–'2.)

XVI.

The court erred in giving instruction No. 10 asked by tha defenendant, as follows, to wit: "The burden of showing negligence on the part of the defendant, that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine where the deceased persons worded was ventilated. The presumption is that the mine was properly and sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony, the jury believ- that notwithstanding the partial obstruction existed, there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such dec-ased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons." (Trans., page- 482–'3.)

XVII.

The court erred in giving instruction No. 11 asked by the defendant, as follows, to wit: "If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly or either of them, by going into said room with a naked light (contrary to the rules and orders of the defendant) and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion and injury were directly and immediately caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor; and a veadict should be rendered for the defendant." (Trans., page 483.)

XVIII.

The court erred in failing to instruct the jury that if Flick and Kelly went into room eight in company with or under the direction of the mine foreman, Donahoe, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstand-

ing the explosion may have been directly occasioned by the act of Flick and Kelly. (Trans., page 494.)

XIX.

The court erred in its charge to the jury by ignoring the fact that there was evidence tending to show that Donahoe's body was found in room eight in close proximity to the bodies of Flick and Kelly and also the fact that from this evidence the jury had a right to infer that Donahoe ignited the gas.

XX.

The court erred in overruling the motions for new trials.

502 Wherefore the said plaintiff in error prays that the said record and proceedings and the judgments may be examined by this honorable court, the errors therein corrected, said judgments reversed, and that she may be restored to all things which she hath lost by reason thereof.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff in Error.

Now comes the above-named defendant in error and joins in error and says that there is no error in the record and proceedings in the said three cases consolidated

By R. E. TWITCHELL,
Attorney for Defendants in Error.

And thereafter, at a regular term of the supreme court of the Territory of New Mexico, begun and held at Santa Fé, New Mexico, the seat of government of said Territory, on the last Monday of July, being the first day of said term, and the same being the 25th day of July, A. D. 1898, the following, among other, proceedings were had as follows, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, vs. CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 777, 778, 779. Error to District Court, Santa Fé County.

Now comes plaintiff in error, by her attorneys, Messrs. Neill B. Field and F. W. Clancy, and defendant in error comes, by its attorney, R. E. Twitchell, Esquire, and by agreement of the said parties in open court it is ordered by the court that these three causes be, and they hereby are, consolidated, to be heard as one cause, as though there were but one judgment and one record; that but one transcript of the record in the court below be required for the three cases, and but one set of briefs on each side.

503 And afterwards, to wit, at the regular term of said supreme court last aforesaid, on the 22nd day thereof, the same being Monday, August 22nd, 1898, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, *Plaintiff* in Error.	777, 778, 779. Error to Santa Fé County.

This cause coming on to be heard on the transcript of record, assignment of errors, and brief of counsel, was partly argued by F. W. Clancy for plaintiff in error.

And afterwards, to wit, at the regular term of said supreme court last aforesaid, on the twenty-third day thereof, the same being Tuesday, August 23, 1898, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	777, 778, 779. Error to Santa Fé County.

This cause again coming on to be heard was argued by F. W. Clancy, Esq., and Neill B. Field, Esq., for plaintiff in error, and R. E. Twitchell, Esq., for defendant in error, and submitted to the court, and the court, not being sufficiently advised in the premises, takes the same under advisement.

504 And afterwards, to wit, on the 24th day of January, A. D. 1899, there was filed in the office of the clerk of the supreme court for the Territory of New Mexico an additional transcript of record in the above-entitled cause; which said transcript is in words and figures as follows, to wit:

In the District Court in and for the County of Santa Fé, in the First Judicial District of the Territory of New Mexico.

DESERANT, Adm'ix, *versus* CERRILLOS COAL RAILROAD CO.	Nos. 3580, 3581, and 3582.

Motion.

Now comes the defendant in the above-entitled causes and states to the court that heretofore, to wit, on the sixteenth day of December, A. D. 1897, at a term of the said district court then in session, the trial of the above-entitled causes was begun and had, and there-

after, at such term, on, to wit, the thirtieth day of December, A. D. 1897, the said trial was concluded, and the verdict of the jury in said causes was duly returned into court finding the defendant in said causes not guilty; whereupon a notice of a motion for a new trial was given by plaintiff in said causes, and thereafter, to wit, on the third day of January, A. D. 1898, said motion was by plaintiff duly filed, and then and there argued, and thereafter, to wit, on the fourth day of February, A. D. 1898, the said motion for new trial was by the said court overruled and denied and judgment then and there by the court rendered and announced in favor of the defendant in the said causes; that, notwithstanding the said proceedings, no entry of record appears in the said district court setting forth such judgment of the said district court in favor of the said defendant in the said causes, as the same was rendered and announced by the said court.

Defendant therefore moves the court that the clerk of this court be instructed, directed, and authorized to enter in the records of this court, and to insert therein of record in the above-entitled causes, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the judgment of the said court then rendered and announced, adjudging that the defendant herein go hence without day, and that defendant have such other further relief as may be proper in the premises.

H. L. WALDO,
R. E. TWITCHELL,
Attorneys for said Def't.

505 In the District Court, County of Santa Fé, First Judicial District, Territory of New Mexico.

DESERANT, Adm'x,
versus
CERRILLOS COAL RAILROAD CO. } No. 3580, 3581, and 3582.

Order.

It appearing to the court, by the motion of said defendant, that heretofore, to wit, on the 16th day of December, A. D. 1897, at a term of the said district court then in session, the trial of the above-entitled causes was begun and had, and thereafter, at such term, on, to wit, the 30th day of December, A. D. 1897, the said trial was concluded, and the verdict of the jury in said causes was duly returned into court, finding the defendant in said causes not guilty; whereupon a notice of a motion for a new trial was given by the plaintiff in said causes; and thereafter, to wit, on the 3rd day of January, A. D. 1898, the said motion for new trial was by the said court overruled and denied, and judgment then and there by the court rendered and announced in favor of the defendant in the said causes, and that, notwithstanding the said proceedings, no entry of record appears in the said district court setting forth such judgment of the said district court in favor of the said defendant in the

said causes as the same was rendered and announced by the said court; whereupon and by reason whereof said defendant now moves the court that the clerk of this court be instructed, directed, and authorized to enter in the records of this court and to insert therein of record in the above-entitled causes, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the judgment of the said court then rendered and announced, adjudging that the defendant herein go hence without day, and that defendant have such other further relief as may be proper in the premises; and the court being now suffi ciently advised therein—

It is therefore considered, ordered, and adjudged that the clerk of this court be, and he is hereby, authorized, directed, and ordered to insert and enter as part of the record in the above-entitled causes in this court, *nunc pro tunc*, as of the fourth day of February, A. D. 1898, the words and figures following, to wit:

"DESERANT, Adm'x,
versus
CERRILLOS COAL RAILROAD COMPANY. } Nos. 3580, 3581, and 3582.

These causes coming on for hearing on the motion of the
506 plaintiff to set aside the verdict and for a new trial herein, the court, on consideration thereof, overrules the same; and it is therefore considered by the court that the said defendant go hence without day and recover from the plaintiff its costs herein expended."

JOHN R. McFIE, *Judge*, &c.

January 23rd, 1899.

TERRITORY OF NEW MEXICO:

District Court, First Judicial District, County of Santa Fé.

DESERANT, Adm'x,
vs.
CERRILLOS COAL RAILROAD CO. } No. 3580, No. 3581, No. 3582.

I, A. M. Bergere, clerk of the district court of the first judicial district in the Territory of New Mexico, do hereby certify that the foregoing 2 pages and 9 lines contain a true, correct, and complete copy of motion & order, *nunc pro tunc*, of judgment in the above-entitled causes.

In witness whereof I have hereunto set my hand and the seal of said court, at my office, in the city of Santa Fé and
[SEAL.] county and Territory aforesaid, this 23rd day of January, A. D. 1899.

A. M. BERGERE, *Clerk*.

507 And afterwards, at the regular term of said supreme court last aforesaid, on the thirty-sixth day thereof, the same being Tuesday, February 21st, 1899, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Adm'r'x, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD CO., Defendant in Error. | No. 777, '8, '9. Error to District Court, Santa Fé County.

Now comes the plaintiff in error, by her attorney, F. W. Clancy, and the defendant in error, by its attorney, R. E. Twitchell, and show to the court here that the transcript of the record of these cases, sent from the district court prior to the hearing of these cases in this court, was defective in that it failed to show the final judgment of the district court, although such judgment was actually rendered in and by said district court, and that the record in said district court has been corrected by the entry of a judgment, *nunc pro tunc*, as of the fourth day of February, 1898, as appears from an additional transcript certified from the district court, which additional transcript is now submitted to the court; and thereupon, by agreement of said parties, by their said attorneys, it is ordered by the court that the said additional transcript be received and filed as a part of the record in these cases, with the same force and effect as though it had been included in and made a part of the original transcript of record from the district court; therefore, these cause having been heretofore heard and submitted to and taken under advisement by the court upon a former day of the present term, the court, being now sufficiently advised in the premises, announces its decision, by Chief Justice William J. Mills, Associate Justices John R. McFie, J. W. Crumpacker, Frank W. Parker, and Charles A. Leland concurring, affirming the judgment of the court below for reasons stated in the opinion of the court on file. It is therefore considered and adjudged by the court that the judgment of the district court in and for the county of Santa Fé, whence this cause came into this court, be, and the same hereby is, affirmed, and that, in accordance therewith, it is therefore considered and ad-
508 judged by the court that the said defendant in error go hence without day, and recover from said plaintiff in error its costs herein expended.

509 And afterwards, at the regular term of said supreme court last aforesaid, on the fortieth day of said term, the same being Saturday, February 25, 1899, the following, among other, proceedings were had, to wit:

JOSEPHINE DESERANT, Admr., Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error. | Nos. 777, 778, and 779. Error to District Court of Santa Fé County.

On motion of said plaintiff in error, by her attorney, F. W. Clancy, it is ordered by the court that the map filed in the office of the clerk of this court and marked on the face thereof "Map showing the inside workings of the Cerrillos Coal Railroad Com-

pany's White Ash mine at Madrid, N. M.," be, and the same hereby is, allowed to be withdrawn from the files of this court for the purpose of transmission to the Supreme Court of the United States, to be used upon the hearing of said causes before said court, and the clerk is authorized and directed to transmit said map with the record herein as a part thereof to the Supreme Court of the United States.

510 And afterwards, to wit, on the 17th day of December, 1898, there was filed in the office of the clerk of the supreme court of New Mexico the opinion of said court rendered in said cause; which said opinion is made a part of this transcript and is in the words and figures following, to wit:

511 In the Supreme Court of the Territory of New Mexico, the July Term, 1898.

JOSEPHINE DESERANT, Admi'x of the Estate of Henry Deserant, Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 777. Error to Santa Fé County.
JOSEPHINE DESERANT, Admi'x of the Estate of Jules Deserant, Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 778. Error to Santa Fé County.
JOSEPHINE DESERANT, Admi'x of the Estate of Henry Deserant, Jr., Deceased, Plaintiff in Error, *vs.* CERRILLOS COAL RAILROAD COMPANY, Defendant in Error.	No. 779. Error to Santa Fé County.

Syllabus.

No. 1. In a suit brought to recover for the death of a coal-miner who is killed in an explosion in a coal mine, where the plaintiff claims that the explosion was caused by an air course being partially obstructed by an accumulation of water so that sufficient air was not passing through it to properly ventilate the mine, the burden of proof is on the plaintiff to show that such air course was so obstructed that sufficient air was not passing through it.

No. 2. The pit boss of a mine, working under a superintendent who has charge of the whole property and its workings, is a fellow-servant of the other employés, and the corporation is not liable to an administratrix for the death of an employé caused

by an explosion occasioned by workmen going into a room where there is an accumulation of gas, over a danger signal, with a naked light, either by the direction of the pit boss or with him.

512 Error to the district court, Santa Fé county, before Mr. Justice N. B. Laughlin.

Actions by Josephine Deserant, administratrix, against the Cerrillos Coal Railroad Company for the death of plaintiff's intestates. From a judgment in favor of defendant, plaintiff brings error. Sustained.

Niell B. Field and Frank W. Clancy, Esqrs., for plaintiff in error.

Henry L. Waldo and Ralph E. Twitchell, Esqrs., for defendant in error.

Opinion of the Court.

This is the second time these cases have been for review. In these several actions damages are claimed by the plaintiff, as administratrix, against the defendant for the death of her husband, Henry Deserant, and her sons, Jules Deserant and Henry Deserant, Jr., by an explosion which occurred in the "White Ash mine" on Wednesday, February 27th, 1895, at about 10.45 a. m.

For the purposes of the trial, the three cases were consolidated by order of the court below and were also heard in this court in the same manner.

The declarations charge negligence in various ways, but on the trial no proof, other than circumstantial, was offered to show what was the cause of the explosion or where it began. In the language of the learned judge who wrote the opinion when this case was last before this court, "it appears that by this explosion all the employés, 23 in number, who were at the time in the fourth left entry (except those in what was called the 'plane') were killed, and therefore all evidence to show how the explosion occurred and where was its initial point is necessarily circumstantial."

Cerrillos Coal Railroad Co. *vs.* Deserant, 49 Pac., 807.

It is unnecessary for us to go into the particulars of the accident or show the workings of the mine, as they are sufficiently set out in the case of Cerrillos Coal Railroad Co. *vs.* Deserant, *supra*, heretofore reported. The only substantial difference in the evidence is that on the former trial it was testified that the body of
513 Kelly was found in the upper cross-cut, between rooms 8 and 9, and the body of Flick was found on the railroad track in room number 8, above the cross-cut, while in the present case it is shown by the testimony of Kelly, one of the witnesses for the plaintiff, that the bodies of Kelly, Flick, and Donohue were found within a few feet of each other.

The theory of the prosecution as to the cause of the explosion is the same now as then, to wit, that owing to an accumulation of water previous to the explosion in a low place in the fourth left air

course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases; that Kelly and Flick, who were company men—that is, men who were paid by the day and not according to what work they did—acting under instructions from Donohue, the day pit boss, went with him or by his direction into room 8 to remove a railroad track, carrying naked lights, and that such lights set fire to the gas which had accumulated there by reason of the insufficiency of air and caused the explosion.

This theory is purely speculative and is not supported by the evidence. It cannot be positively proved what was the in-tial point of the explosion or what caused it. In fact the evidence goes to show, from measurements taken at various times by the superintendent of the mine, the pit boss, and the United States inspector, that sufficient air was going through the fourth left air course and mine to make it safe. Indeed the evidence goes further and shows that after the explosion and on the day of the investigation by the coroner's jury, and while much of the debris caused by the explosion was still in the fourth left air course, a sufficiency of air was passing through it over the water and debris through the low place, which — claimed by the plaintiff to have been obstructed by water, for the proper ventilation of the entry and its rooms and the expulsion of all harmful gases, and for the men and animals working there at the time of the explosion. There is no evidence that
514 the condition of the fourth left air course was the direct or proximate cause of the explosion, and for the plaintiff to recover this must be proved by a preponderance of the evidence.

That Flick, Kelly, and Donohue were fellow-servants of the deceased cannot be questioned. It is true that Donohue was an employé of a higher grade than either Kelly, Flick, or the deceased, but still he was a fellow-servant. This has been too often decided to need to be enlarged upon here.

A., T. & S. F. R. R. Co. *vs.* Martin, 7 N. M., 158.
Martin *vs.* A., T. & S. F. R. R. Co., 166 U. S, 399.
Alaska Mng. Co. *vs.* Whalen, 168 U. S., 86.

If, therefore, the contention of the plaintiff is true, that the explosion was caused by Kelly and Flick, by the order of Donohue, or by all three going into room number 8, where there was an accumulation of gas, with a naked light, over the danger signal (although, as before stated, that this was the cause of the explosion is purely speculative), and causing it to ignite, the plaintiff cannot recover, as the accident was the result of the negligence of a co-employé or fellow-servant. This case is governed by A., T. & S. F. R. R. Co. *vs.* Martin, 7 N. M., 158; Cerrillos Coal Railroad Co. *vs.* Deserant, 49 Pac., 807, and by a series of decisions in the United States Supreme Court undistinguishable in principle from this one.

Railroad Co. *vs.* Baugh, 149 U. S., 368.
Alaska Mng. Co. *vs.* Whalen, 168 U. S., 86, and cases there cited.

It is unnecessary for us to consider the objections urged to the instructions given by the court below. In our opinion they were all in favor of the plaintiff, as the court should have granted
515 the motion of the defendant and instructed the jury to find the defendant not guilty.

There is no error in the judgment of the court below, and it is therefore affirmed.

WILLIAM J. MILLS,
Chief Justice, etc.

We concur.
JOHN R. McFIE, *A. J.*
FRANK W. PARKER, *A. J.*
J. W. CRUMPACKER, *A. J.*
CHARLES A. LELAND, *A. J.*

December 17th, 1898.

516 TERRITORY OF NEW MEXICO, }
County of Santa Fé. }

Supreme Court.

I, clerk of the supreme court of the Territory of New Mexico, do hereby certify that the foregoing is a full, true, and perfect copy of the record of proceedings, pleadings, and opinion filed in the three causes lately pending in said supreme court, numbered 777, 778, and 779, which is transmitted to the Supreme Court of the United States in obeyance to writs of error hereto attached; and I further certify that there is in my office but one record, set of proceedings, pleadings, and opinion in said three causes.

Witness my hand and the seal of the supreme court of the Territory of New Mexico this 25th day of February, A. D. 1899.

[Seal Supreme Court, Territory of New Mexico.]

JOSÉ D. SENA,
Clerk Supreme Court of New Mexico.

(Here follows map marked p. 517.)

518 In the Supreme Court of the United States.

JOSEPHINE DESERANT, Administratrix, Plaintiff in Error, }
vs.
CERILLOS COAL RAILROAD COMPANY, Defendant in Error. }

Now comes the said appellant, by her attorney, and says to the court that there is manifest error in the record and judgment of this cause, and specifies the following as errors therein:

I.

The district court erred in overruling the objection of plaintiff in error to the question: "Then, if this explosion occurred at 10.45, state whether or not—state what at that particular time the miners

FOLD-OUT IS TOO LARGE TO BE FILMED

in the room would be engaged in" (page 132 of Transcript), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

II.

The district court erred in permitting the witness Fletcher to testify, over objection of plaintiff in error, that he had seen flame from a gunning shot extend seventy feet in the third right entry of the White Ash mine (Trans., page 134), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

III.

The district court erred in permitting the witness Fletcher to answer the question: "What effect, if any, would such a condition have upon small quantities of gas there passing in any portion of the mine or in any portion of the fourth left entry which, under ordinary conditions, would in no way be dangerous in the
519 operation of the mine?" (Trans., page 135), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IV.

The district court erred in permitting the witness Fletcher to answer the question, "From your experience as a miner and your connection with mines which generate gas, what have you to say with reference to the possibilities of a sudden and unlooked-for appearance of gas at any place in the White Ash mine" (Transcript, page 148), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

V.

The district court erred in permitting the witness Fletcher to answer the question, "I will ask you what any two men going into room 8 and finding the brattice in that room down would have done if they had seen a danger signal lying across the track in that room" (Transcript, page 178), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VI.

The district court erred in refusing to permit the witness Kilpatrick to answer the question, "Was there any means provided for removing that water from the 4th left air course prior to the explosion?" (Transcript, page 227), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

520

VII.

The district court erred in permitting the witness Duggan to answer the question, "With reference to the operation of coal mines of the character of the White Ash, I will ask you now whether or not you are able to state whether the stoppings in the various crosscuts were or were not of the kind accustomed to be used in mines of that character for the purpose of carrying air around to the face of the working places" (Transcript, page 347), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

VIII.

The district court erred in refusing to permit the witness Duggan to answer the question, "If such an opening were made by the fire boss under the direction of the mine foreman, should it have been reported to you?" (Transcript, page 374), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

IX.

The district court erred in refusing to permit the witness Duggan to answer the question, "Unless that had been done it would have been impossible to go into the mine, would it not, Mr. Duggan?" (Transcript, page 378), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

X.

The district court erred in refusing to permit the witness Duggan to answer the question, "And the fact of the business is, Mr. Duggan, that you don't know anything about this, and that you are trying to speculate, theorize upon some theory that would result in releasing the defendant company from liability, is that not
521 so?" (Transcript, page 387), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XI.

The district court erred in refusing to instruct the jury at the close of the evidence that the defendant was guilty of negligence, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XII.

The district court erred in refusing to take the case from the jury and find the facts when both parties asked for peremptory instructions, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIII.

The district court erred in submitting to the jury anything except the question of damages, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIV.

The district court erred in giving instruction number 1 asked by the defendant as follows: "The jury are instructed that what was required of the defendant in the conduct of its mining business, in caring for the miners employed by and engaged in working its mine, was the adoption and use of appliances and methods reasonably sufficient for the protection of the miners against any dangers attending the operation of its mine that were obvious or might with reasonable diligence have become known, and in the absence of evidence to the contrary it is presumed that the defendant performed its entire duty towards the miners in that respect" (Trans., page 481), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

522 XV.

The district court erred in giving instruction No. 6 asked by the defendant as follows, to wit: "Although the jury may believe from the evidence that gas of the quantity mentioned in the evidence had accumulated and was allowed to remain in room 8 for the time stated in the evidence, and believe from the evidence that the explosion testified to originated in room 8, and further believe from the evidence that signals of the kind described in the evidence warning against entry into said room were placed in such manner as to be observed by the deceased, Flick, and Kelly, and the meaning and significance of such signal was understood by them, and such signal was known to be in use by the miners engaged in working in said mine, and that the use of such signal was understood by such miners to inform them of the presence of gas in dangerous quantity, then, if the jury believe from the evidence that such explosion was caused by Flick and Kelly entering said room with a naked light, the defendant is entitled to and you should render a verdict in its favor" (Trans., page- 481-'2), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XXVI.

The district court erred in giving instruction No. 10 asked by the defendant as follows, to wit: "The burden of showing negligence on the part of the defendant that caused the death of the persons for which this action is brought is upon the plaintiffs, and evidence has been introduced for the purpose of showing an obstruction of the air course through which that portion of the mine was ventilated. The presumption is that the mine was properly and
523 sufficiently supplied with air, unless the evidence offered establishes the contrary, and to do this the jury must find

not only a partial obstruction of the air course, but that the obstruction was of such a nature and to such an extent as to prevent the passage of the necessary quantity of air, and if upon the whole testimony the jury believe that, notwithstanding the partial obstruction, there still was space enough in the air course unobstructed to allow the proper and sufficient ventilation of the mine and of the fourth left entry where such deceased persons were at work, you will find a verdict for the defendant, unless you find from the evidence that the negligence of the defendant in some other way caused or contributed to the death of such persons" (Transcript, page 482–'3), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XVII.

The district court erred in giving instruction No. 11 asked by the defendant as follows, to wit: "If the jury shall believe from the evidence that the defendant permitted fire-gas to accumulate in room eight of its mine, and that such gas would not produce any injury until ignited, and that it was ignited by Flick and Kelly, or either of them, by going into said room with a naked light (contrary to the rules and orders of the defendant), and by such naked light the fire-gas was ignited and exploded, causing the death of plaintiff's intestates, such explosion — caused by the act of the fellow-servants of plaintiff's intestates, and not by the negligence of defendant, and defendant is not liable therefor, and a verdict should be rendered for the defendant" (Transcript, page 483), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

524

XVIII.

The district court erred in failing to instruct the jury that if Flick and Kelly went into room eight in company with or under the direction of the mine foreman, Donahoe, without any knowledge of the existence in said room of a dangerous body of gas at the time of going in, and that at the time of the explosion Flick and Kelly were using due care to avoid accident, the defendant was liable, notwithstanding the explosion may have been directly occasioned by the act of Flick and Kelly (Trans., page 494), and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XIX.

The district court erred in its charge to the jury by ignoring the fact that there was evidence tending to show that Donahoe's body was found in room eight in close proximity to the bodies of Flick and Kelly, and also the fact that from this evidence the jury had a right to infer that Donahoe ignited the gas, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

XX.

The district court erred in overruling the motions for new trials, and the supreme court of New Mexico erred in refusing and failing to consider such action of the district court as erroneous.

525

XXI.

The supreme court of New Mexico erred in affirming the judgment of the district court.

XXII.

The supreme court of New Mexico erred in its statement in its opinion that the theory of the prosecution as to the cause of the explosion was that owing to an accumulation of water in a low place in the fourth left air course a sufficient quantity of pure air was not going to the face of the workings in the fourth left entry to remove and expel the noxious gases, and that Kelly and Flick with naked lights set fire to the gas which had accumulated by reason of the insufficiency of air.

XXIII.

The supreme court of New Mexico erred in its statement that, from measurements taken at various times, sufficient air was going through the mine, as the measurements were all taken at times long before the explosion and showed a diminishing supply of air.

XXIV.

The supreme court of New Mexico erred in its opinion where it states that at the time of the investigation by the coroner's jury a sufficiency of air was passing through the fourth left air course, as that fact was immaterial, and the evidence showed that at the time the mine was idle and a large part of the water had been removed after the explosion.

XXV.

The supreme court of New Mexico erred in its opinion where it states that there is no evidence that the condition of the fourth left air course was the proximate cause of the explosion.

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XXVI.

The supreme court of New Mexico erred in its opinion where it holds that for plaintiff to recover it must be proved that the condition of the fourth left air course was the proximate cause of the explosion.

XXVII.

The supreme court of New Mexico erred in its opinion where it states that plaintiff's contention was that the explosion was caused by Kelly and Flick, by the order of Donahue, or by all three, going into room number 8 with a naked light over the danger signal.

XXVIII.

The supreme court of New Mexico erred in its opinion where it declares that if the explosion was caused by Kelly and Flick, by the order of Donahue, going into room No. 8 with a naked light and igniting the gas, the accident was the result of the negligence of a fellow-servant, and therefore plaintiff could not recover.

XXIX.

The supreme court of New Mexico erred in its opinion where it holds that the district court should have instructed the jury to find the defendant not guilty.

Wherefore appellant prays that the judgment of the court below be reversed, vacated, and set aside and this cause remanded with directions to grant a new trial.

NEILL B. FIELD,
F. W. CLANCY,
Attorneys for Plaintiff in Error.

527 [Endorsed:] Josephine Deserant, administratrix, &c., *vs.* Cerrillos Coal Railroad Company. Assignment of errors.

Endorsed on cover: File No., 17,376. New Mexico Territory supreme court. Term No., 269. Josephine Deserant, administratrix of the estates of Henri Deserant, Jules Deserant, and Henri Deserant, Jr., plaintiff in error, *vs.* Cerillos Coal Railroad Company. Filed April 22d, 1899.